ENERGY AND WATER, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2006

THURSDAY, MARCH 10, 2005

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:01 a.m., in room SD–192, Dirksen Senate Office Building, Hon. Pete V. Domenici (chairman) presiding.

Present: Senators Domenici, Allard, Reid, and Murray.

DEPARTMENT OF ENERGY

OFFICE OF ENVIRONMENTAL MANAGEMENT

STATEMENT OF PAUL M. GOLAN, PRINCIPAL DEPUTY ASSISTANT SECRETARY FOR ENVIRONMENTAL MANAGEMENT

OPENING STATEMENT OF SENATOR PETE V. DOMENICI

Senator DOMENICI. The hearing will please come to order. I understand that Senator Reid and Senator Murray may attend, but Senator Reid, ranking member, as usual has been very accommodating. Because of his busy schedule he has suggested that we start and he will arrive shortly. I think it's—the scheduled time has arrived.

So good morning everyone. Today the subcommittee is going to take testimony on the fiscal year 2006 budget request for the Office of Environmental Management and the Office of Civilian Radioactive Waste Management. We're joined by Paul—do you say Golan?

Mr. GOLAN. Yes, sir.

Senator DOMENICI. Principal Deputy Assistant Secretary for Environmental Management. You have some big shoes to fill. Your predecessor was a very——

Mr. GOLAN. Yes, I do.

Senator DOMENICI [continuing]. Excellent person. And Ted Garrish, Deputy Director for the Office of Civilian Radioactive Waste Management. Essentially that's a nice name for the Yucca Mountain project. That's an easy job.

Mr. GARRISH. Yes, sir.

Senator DOMENICI. I don't know how—well, I'm looking at you now, so we can see what you look like in 3 or 4 years.

Mr. GARRISH. Much grayer.

Senator DOMENICI. I understand that both of you are serving as acting replacements for Jessie Roberson and Dr. Chu. Both women were exceptional administrators and I enjoyed working with both of them. Obviously everyone knows that Dr. Chu was from New Mexico, from one of our great laboratories. While she was a very small person, she carried a very big stick. She was a very powerful person with a very, very fine intellect, and we appreciated her wonderful work.

I do appreciate your participation here today. This year's presidential budget requests $6.5 billion for environmental clean-up activities. This is a reduction from $7.4 billion that we appropriated last year, which was in turn the highest level we had provided in the history of the clean-up program.

Over the past 4 years, the Department succeeded in reducing the total cost of the environmental clean-up—I didn't see you, Senator. Good morning.

Senator MURRAY. Good morning, Senator.

Senator DOMENICI. Of environmental clean-up by $50 billion—that is the expected cost—and shortening the estimated time table imagined by 35 years. Now you'll have to tell us how much that leaves. We shortened it by 35 years, but it's still a long time left.

By focusing on risk-based clean-up as a strategy and accelerated clean-up agreements with States, the Department contends—there it is—they'll finish by 2035. By the end of 2006, DOE will complete an additional 10 facilities, including Rocky Flats in Colorado. This will bring the total of sites that have been cleaned up to 89 of the 114 sites.

The President's budget has proposed shifting clean-up responsibilities from the Office of Environmental Management to the NNSA at six sites. The budget claims that operational efficiencies can be achieved by eliminating the dual chain of management between DOE and NNSA. While I agree with the goal of the increased efficiency, I'm not totally convinced and have some concerns about NNSA. They may not be able to do this and they may have so much to do they might not be up to the challenge. They have many responsibilities, including the maintaining of our nuclear deterrent and combating proliferation of nuclear materials. So it remains to be seen as to whether that change in the management scheme would be acceptable up here, at least for this committee.

The President's budget requests $651 million for Yucca Mountain to be funded from the civilian nuclear waste fund and defense nuclear waste account. This is up 14 percent from $572 million, and while it's not as much as could be used, it is indeed a very good change in that it is funded in a way that will not charge this account against the appropriated account, which made it very difficult in the past, because the President would not charge it—would not charge it to the accounts of the appropriation, and we were compelled to by our rules. So that's been fixed and we appreciate OMB doing that.

The President did not include the reclassification of the fee paid into nuclear waste fund as we proposed last year. However, the President did suggest as a matter of fairness that the annual fee

collections be consistent with the level of appropriations, as I just indicated, and that makes sense.

While this funding debate was underway, the State of Nevada—and the Senator from the State of Nevada has just arrived—one lawsuit effectively vacating the radiation standard, as proposed by the Environmental Protection Agency. The Yucca Mountain project is facing some critical legal and political challenges, and the landscape we face today is a very difficult one. In addition to tight budgets, the Department has slipped the submittal of a license application by another year.

Also, the administration is working to address the court of appeals' ruling that has discussed a radiation standard of 10,000 years. Now the EPA must promulgate new standards and go through whatever legal hoops are involved in that.

Last week in a separate hearing, the Energy and Natural Resources Committee when we had the new Secretary here, I asked him to provide a status report on Yucca Mountain that will give us an update on all the various issues, licensing, safety assessments, technical challenge, transportation needs. I hope the Department is working on this project. If not, to the extent that you can serve as a reminder for that, I ask that you do that for the committee.

Now I note that the distinguished minority leader has arrived, and I'm going to yield to him. I'd like to remind the witnesses that your statements are going to be made a part of the record now, so I don't think you have to give them in detail. We'd like you to abbreviate them. With that, Senator Reid.

STATEMENT OF SENATOR HARRY REID

Senator REID. Mr. Chairman, thank you very much. I'm grateful to you for holding these hearings, especially in light of the fact that we have the most important bill—resolutions before the Budget Committee, and you having been chairman of that for so many years. I want to extend my appreciation to Patty Murray for filling in for me today for this hearing. She is a stalwart member of the Appropriations Committee and I am grateful for her helping on this issue today.

Last year was really a bad year for Yucca Mountain. On July 9, 2004, the Circuit Court of Appeals ruled with the State of Nevada about radiation standards. A month later, the NRC's Atomic Safety and Licensing Board rejected DOE's Yucca Mountain document database, saying it failed to make public many of the documents it had in its possession. October 4, last year, DOE Inspector General found DOE gave away more than half a million dollars worth of Yucca Mountain construction equipment. On November 22, the Nuclear Waste Technical Review Board said DOE does not have a plan for safely transporting nuclear waste. Just in February, Margaret Chu, the former director, said that she was going to delay the application which would probably take until 2006 before the application would be considered by the Nuclear Regulatory Commission.

There are just so many other things I want to say that in spite of the fact that a lot of people think that Senator Domenici and I are constantly at each other's throat on this issue, we have, I think, constructively worked over the years to do what legislators

are supposed to do, and that is work toward compromise. We've done that. I appreciate his attention to this matter each year and look forward to working with him.

And the most important part of all of this is going to be when we finish our bill, what happens with the House of Representatives, not only on this issue, but all issues. We've developed a tremendously difficult situation with the House and I hope we can resolve it better than we did last year.

Thank you, Mr. Chairman. If you would excuse me, I'd appreciate it.

Senator DOMENICI. Yes. Thank you very much. Senator from Colorado, would you like to make a comment?

Senator ALLARD. I would, Mr. Chairman, if I might.

Senator DOMENICI. Please.

STATEMENT OF SENATOR WAYNE ALLARD

Senator ALLARD. First of all, this is the first time I've had an opportunity to attend this subcommittee meeting. I just want to tell you how much I appreciate being on the Appropriations Committee and particularly being on this subcommittee. I look forward to working with members of this subcommittee.

I just want to—I do have a total statement I'd like to make a part of the record—but I'd just like to call to the attention of the committee that we do have a success story that is happening in the State of Colorado with Rocky Flats. Originally some 10 years ago, we were looking at cost estimates of over 70 years and $35 billion. With some extra expenditure up front, we figured we could save a lot of money over time, and we have. And on top of that, we are now a year ahead of schedule from what I understand, and that we're going to save close to a billion dollars.

And this is a cost savings—this is a—due to incentive-driven contracts, where you pay bonuses for performance, and this is reflected, I think we've saved taxpayers a lot of dollars. You'll probably hear more about it, Mr. Chairman, and I look forward to continuing to work with this committee on issues that are important.

PREPARED STATEMENT

Thank you very much to the country. Thank you. Mr. Chairman, I'm going to be gone too, because as you know, I serve with you on Budget Committee and I've got to be there for some amendments, so if I could be excused, I would appreciate it.

[The statement follows:]

PREPARED STATEMENT OF SENATOR WAYNE ALLARD

Thank you, Mr. Chairman, for holding this important hearing. Over the last 4 years, the Department of Energy's Environmental Management program has made enormous progress. Under the leadership of former Under Secretary Bob Card, former Assistant Secretary Jesse Roberson and now Acting Assistant Secretary Paul Golan, EM has taken several steps forward. Today, in Colorado, we have seen the fruits of their labor and we thank them for their efforts.

Mr. Chairman, 10 years ago, most doubted that Rocky Flats could be cleaned up in 6 years and for under $7 billion. In fact, most thought the clean-up would take 70 years and cost as much as $35 billion. The task of cleaning up Rocky Flats was considerable. Over 800 facilities and structures had to be torn down, including building 771, which was labeled the "Most dangerous building in America" because of the level of contamination present. Indeed, much of the 385-acre industrial area

needed to be decontaminated and treated. The special nuclear material also needed to be shipped off site and the orphan waste needed to be disposed of.

Now, we are on the brink of a major success story. The Department of Energy announced just last week that clean-up was a year ahead of schedule and will save the taxpayers close to $1 billion. Few of the buildings remain and most of the decontamination effort has been completed.

I believe the success we have seen at Rocky Flats is a result of combined effort by the Department of Energy, the local governments, the State of Colorado, the Colorado delegation, and with committees like this one. Because of team work and cooperation we have enjoyed at the local, State, and Federal levels, the people of Colorado will shortly be able to live without the fear of nuclear contamination. It is my hope that in a few months I will be able to invite you, Mr. Chairman, and other members to this committee to join me at a ceremony this fall celebrating the completion of the clean-up at Rocky Flats.

Thank you, Mr. Chairman for the opportunity to share a few words about Rocky Flats. I look forward to the testimony of our witnesses.

Senator DOMENICI. I will be there shortly.

Senator ALLARD. Okay. Very good.

Senator DOMENICI. I just wanted to say we welcome you, Senator, and we know that you have a genuine interest, not only in the issue you just described, but in your State you have a very powerful facility with reference to renewable energy.

Senator ALLARD. Yes, that's true.

Senator DOMENICI. And we have funded it regularly and we look forward to you participating in the oversight, because it is a formidable operation. And in all other respects we welcome you, because you will be a dedicated member.

Senator Murray.

STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. Thank you very much, Mr. Chairman. You know, I say it every year, but again I want to thank you and I want to thank Senator Reid for your leadership on this subcommittee. This jurisdiction of this subcommittee really touches on so many critical issues in my State, the Corps of Engineers, Bureau of Reclamation, Pacific Northwest National Lab, and most prominent today is the Hanford nuclear reservation. So I really appreciate the time and consideration you and Senator Reid and the entire subcommittee staff give to matters that affect my State.

I know we all have to get to the Budget Committee that's doing the markup, we've got votes on the floor, so I'll be brief. But I first want to thank Senator Reid for being here. He had to leave as we all know, but I know he and a number of other Senators had statements and questions they wanted submitted, so I'd just ask unanimous consent that those can be submitted for the record and answered in a convenient time frame.

HANFORD CLEAN-UP FUNDING CUTS

Mr. Chairman, I do want to make some comments about the budget for Hanford and for the Environmental Management Program. By my calculation, the Defense Environmental Program has been reduced by $548 million, and Hanford alone will suffer 54 percent of that cut. This massive funding cut is dramatically disproportionate to Hanford's share of the overall EM Program. And that fact, combined with the absolutely lack of sound rationale for

the majority of Hanford budget cuts, can easily lead some of us to believe that the State was targeted by both DOE and OMB.

This—I want to point out just one budgeting issue that makes no sense. The budget cuts the tank farm program by $89 million on the basis of legal uncertainty caused by the reclassification issue. I'll move beyond the fact that DOE itself created that legal uncertainty, but the fact is that the tank farm activities going on this year can and should proceed in fiscal year 2006. There's absolutely no legal or technical reason that these activities have to end on September 30. So this budget is already undercutting a scope of work that has yet to be awarded.

There are a lot of other examples of this budget's lack of integrity and intelligence when it comes to Hanford. I'll not spell them out. But, Mr. Chairman, let me end here with my hope that communication and agreement between Washington State and the Department of Energy is going to improve, and that hope is largely based upon the nominations of Clay Sell and David Garman. I really respect the work they did here in the Senate, their willingness to listen, and their forthright communication, and I hope their confirmations will help us move past the political and legal games and back to the strong partnership between Washington State and the Department of Energy.

PREPARED STATEMENT

But regardless of improving relationships between the State and the Department of Energy, I want you to know I do not accept the Department's rationale for these cuts, and I will urge this subcommittee to maintain the Federal Government's moral and legal obligation to Washington State and the Hanford communities.

Thank you, Mr. Chairman.

[The statement follows:]

PREPARED STATEMENT OF SENATOR PATTY MURRAY

Thank you, Mr. Chairman.

I say it every year, but I again want to thank you and Senator Reid for your leadership on this subcommittee.

The jurisdiction of the subcommittee touches on so much that is critical to my State including the Corps of Engineers, the Bureau of Reclamation, the Pacific Northwest National Laboratory, and—most prominent today—the Hanford Nuclear Reservation.

I appreciate of the time and consideration you, Senator Reid, and the entire subcommittee staff give to matters affecting Washington State.

Now, we both have to get to the Budget Committee that is beginning its mark up at this time, so I'll try to be brief.

I first want to recognize that Senator Reid wished to be here, but Budget Committee and floor matters required his attention.

I know Senator Reid, myself and others likely have statements and questions they would like to have been able to give in person, but will not be able to. I ask that Senators be given an appropriate amount of time to submit these for the record and response from the Department.

Mr. Chairman, I'd like to make some comments about the budget for Hanford and the Environmental Management program.

By my calculation, the Defense Environmental Management program has been reduced by $548 million. Hanford alone would suffer 54 percent of this cut.

This massive funding cut is dramatically disproportionate to Hanford's share of the overall EM program.

This fact, combined with the absolute lack of sound rationale for the majority of Hanford budget cuts, can easily lead one to believe Washington State was targeted by DOE and OMB.

Let's just point out one budgeting issue that makes no sense.

The budget cuts the tank farm program by $89 million on the basis of legal uncertainty caused by the reclassification issue. I will move beyond the fact that DOE itself created this legal uncertainty.

The fact is that tank farm activities going on this year can and should proceed in fiscal year 2006. There is absolutely no legal or technical reason that these activities must suddenly end September 30.

So, this budget is already undercutting a scope of work that has yet to be awarded.

There are other examples of this budget's lack of integrity and intelligence when it comes to Hanford, but I will not spell them all out.

Rather, Mr. Chairman, let me end with my hope that communication and agreement between Washington State and the Department of Energy will improve.

This hope is largely based upon the nominations of Clay Sell and David Garman.

I respect the work they did here in the Senate, their willingness to listen, and their forthright communication.

I hope their confirmations will help us move past the political and legal games and back to a strong partnership between Washington State and the Department of Energy.

But, regardless of improving relationships between the State and the Department of Energy, I do not accept the Department's rationale for these cuts and I will urge this subcommittee to maintain the Federal Government's moral and legal obligation to Washington State and the Hanford communities.

Senator DOMENICI. Thank you very much, Senator. I assure you that we will do everything we can to make sure that whatever happens at Hanford is not the result of any kind of targeting. I'm not aware of that. I don't accept that as reality. We'll see as we work it through, but it's going to be treated fairly.

I can say that as I alluded in my statement, the last 4 years, whatever has been said about the administration, could always complain that the clean-up is not enough, this is the best 4 years of clean-up that we've ever had in terms of getting things done, in terms of achieving goals, in terms of saving money, and in terms of new ideas that will get the job done. And I think there's a lot—you weren't in charge, but a lot that you can be proud of. We want to make sure that continues for the next 4 years, and we're going to do our best to help with that.

And we will proceed now in—let's go in the order that—starting on my left with you, Mr. Golan.

STATEMENT OF PAUL M. GOLAN

Mr. GOLAN. Thank you, Mr. Chairman, and members of the subcommittee. As this is my first time to appear before this committee, I'd like to thank you for the support you've given to the Department of Energy's clean-up program. This support has been crucial in turning this program around and revitalizing it, because it had lost track of its objectives in the 1990's.

Over the last 4 years, our goal has been simple: transform this program from one that managed risks to one that reduces risk and cleans up the environment, a program that delivers real risk reduction, that's safe for the workers, protective of the environment, and respectful of the taxpayers.

Over the last 4 years, we've gotten our sites to focus on this goal and these objectives, which in my written statement, Mr. Chairman, which I'd like to submit for the record, contains a full accounting of the accomplishment of the Environmental Management Program over the last 4 years, articulates a more complete list. I'd

just like to highlight a few of those today as a precursor as we talk about 2006.

At the Savannah River site, we've completed our nuclear stabilization missions. That's plutonium residues, plutonium metals, and plutonium oxides. We've consolidated all our special nuclear materials into two storage vaults. Additionally, we've consolidated all our spent nuclear fuel into a single spent fuel pool.

Just last week we de-inventoried the FB line, once a major nuclear processing facility at Savannah River built in the 1950's that helped fight and win the cold war.

At Hanford, we removed all the spent nuclear fuel from the K-basins, and we're working diligently to get the sludge out today. All pumpable liquids have been removed from the single shelled tanks, dramatically reducing the risk to the Columbia River. Additionally, the nuclear materials stabilization missions, the plutonium and the plutonium residue missions have also been completed at the Hanford site.

At Idaho, all the spent nuclear fuel has been either dry-stored or put into our most robust storage basin. And right now we're actually removing water from the five older, less robust basins, dramatically reducing the risk to the Snake River aquifer. We've also taken down 300,000 square feet of old and decaying infrastructure at that facility, and just in the last 15 months, reducing our fixed costs and allowing the Idaho National Laboratory to engage on its new mission.

At Rocky Flats, as Senator Allard alluded to, we've just completed demolition of two major nuclear facilities: Building 771, which in the 1990's was called the most dangerous facility in America, and building 707, which is the facility that manufactured all the pits in the nuclear weapons inventory today, have been completely demolished. In addition, just last week we commenced demolition of building 776, the site of the largest industrial and radiological accident at its time in 1969 in the United States. Rocky Flats is on track to meet is closure goals.

In Ohio, we've demolished all the former uranium processing facilities at the Fernald site, and we recently demolished the tritium processing facility at Mound.

In the area of safeguards and security, or places where we store our special nuclear material, we've reduced by over half the number of protected areas this program has, eliminating potential security vulnerabilities as well as reducing the fixed costs, as these are some of the highest cost areas to maintain and keep secure.

These are a sampling of our progress. We are committed to work diligently with all concerned parties to continue to reduce risk and remediate the environment.

Now I'd like to turn this discussion to the administration's fiscal 2006 budget request for the Environmental Management clean-up program and how we plan to use the taxpayers' investment to continue to deliver risk reduction and environmental remediation.

Future success of this program depends on key elements we've worked so hard over the last 4 years to put in place, such as continuing to improve worker safety, where our goal and my personal goal is to eliminate accidents and injuries from the workplace entirely. It depends on continuing to work with our local commu-

nities, tribal nations, regulators, and local representatives. It depends on continuing to challenge our contractors to work smarter and safer under the contract and continuing to bring competition to our work.

Our future success depends on us rising to meet new challenges, and these are going to be demanding challenges, that include finding disposition pathways for waste that has no disposition pathway today. Our future success involves resolving important waste issues that we will work closely with our regulators in South Carolina and Idaho, as well as the Nuclear Regulatory Commission. Our future success depends on our ability to resolve seismic issues that we recently discovered at the waste treatment plant at our Hanford site where we design—where we're designing and constructing a facility to deal with the millions of gallons of waste that's at that site.

Some may say that we have yet to tackle our most difficult issues. A program as large and complex as environmental management is not without issue, nor should anyone expect it to be. Our job is to find those problems and solve them. We have proven we can reduce risk and we've—and complete environmental remediation. We have projected that we can take decades off the time to complete the removing of the source term and hazards decades before anybody hoped or planned.

We did not want to have this program take longer to complete than the actual cold war, which is the origin of our work. We need to maintain our sense of urgency to complete the work rather than put it off. We need to keep a clear and unambiguous vision of risk reduction and continuation of clean-up. Our aim is for a site to be cleaned up so that the end state is protective of the environment while fully supportive of the future users of that site.

Our clean-up approaches are based on good science, require full review and approval by State and local and Federal regulators. Our continuing work with our communities and stakeholders on a day-in and day-out basis is instrumental in addressing these concerns and is crucial for our success.

In fiscal year 2006, for example, our $6.5 billion request includes funding such key activities as decommissioning the F Canyon at Savannah River, reducing a large fixed cost; removing the sludge from the K-basins at Hanford, reducing the risk to the nearby Columbia River; completing our clean-ups at Rocky Flats, Ashtabula, Mound, and Columbus; completing transuranic waste retrieval from Pit 4 at the Idaho National Laboratory; removing a source term over the Snake River aquifer; completing the clean-up of the Melton Valley project at the Oak Ridge reservation; mitigating a major source term that's in close proximity to the Clinch River; and continuing to eliminate our high-security protected areas, further reducing our fixed costs and vulnerabilities.

Over the law few months, some aspects of our clean-up program became clearer and our path forward is better defined. Other aspects of our clean-up program have become less certain and our path forward has become less clear. I'd be more than happy to discuss these particular issues in my question and answer session today.

PREPARED STATEMENT

We believe that will take a combined effort of all parties working together to resolve our challenges so we can continue to deliver risk reduction and clean-up for the community and for the taxpayer. I look forward to working with you and this committee and others to achieve this goal. Thank you, Mr. Chairman.

[The statement follows:]

PREPARED STATEMENT OF PAUL M. GOLAN

Mr. Chairman and members of the subcommittee, I take great pleasure today in discussing the fiscal year 2006 budget request for the Environmental Management (EM) program, our progress in implementing cleanup reform, and the importance of sustaining this momentum for the benefit of our workers, our communities, our environment, and the generations to come.

In 2001, we embarked on a course to revitalize and reform a cleanup program that had lost track of its objectives. As a result of the reforms and Congressional investments of additional funds in the cleanup budget, the Department of Energy set forth to accelerate the reduction of risk and site cleanup completion in a manner that is safe for the worker, protective of the environment, and respectful to the taxpayer. To stay true to these principles and cleanup objectives, EM established business management, project management, and performance management systems, a new organizational structure, and acquisition strategies. The principles and cleanup objectives used as a basis for this transformation are now in place.

This strategy to quickly reduce urgent risks to workers, communities and the environment was tied to our requests for funding increases in fiscal years 2003, 2004, and 2005. The fiscal year 2006 budget request represents the next stage of our strategy. The principles and management systems have been tested and although there are and will continue to be very difficult obstacles, the program is continuing forward. The Department has addressed challenges as they arise and is positioned to move to the next stage of cleaning up the Cold War legacy.

For fiscal year 2006, the President's Budget includes a request for $6.5 billion for the Department's cleanup program, a 7.8 percent reduction from our fiscal year 2005 comparable appropriation. We committed that if we could eliminate urgent risks and associated fixed costs, then starting in fiscal year 2006, we would request a declining level of funding to complete our work. The investment has paid off and we believe we are providing the return on the taxpayer's investment that the American people expect and deserve. Some may say incorrectly that we may be accomplishing less work or will need to slow the pace of cleanup by requesting a lower funding level. But the investments of 2003 through 2005 have allowed us to lower the infrastructure costs, complete work, reduce high cost security areas, and pull work forward. Thus, we have reduced fixed costs, allowing a greater proportion of our funds to go to actual cleanup—a trend we will continue to improve upon.

The EM portion of the fiscal year 2006 congressional budget structure is analogous to last year. The budget structure focuses on completion, accountability, and visibility; institutionalizes our values; and integrates performance and budget. Requested funding can clearly be associated with work that is planned and achievable in 2006.

This budget request reflects a transfer of legacy environmental cleanup at most NNSA sites and management of newly generated waste at Lawrence Livermore National Laboratory and the Oak Ridge Y–12 plant to NNSA. The NNSA Act provides only the Secretary and Deputy Secretary of Energy, through the NNSA Administrator, the authority to direct or control officers', employees', and contractors' work. This creates a very cumbersome and inefficient management structure. Under the proposed transfer, EM would transfer the following activities to NNSA as follows:

—Transfer legacy waste treatment, storage, disposal, and remediation at 7 sites: Nevada Test Site; Sandia National Laboratory; Separations Process Research Unit; Kansas City Plant; Lawrence Livermore National Laboratory Main Site and Site 300; and Pantex Plant to NNSA.

—Transfer newly generated waste activities at 2 sites: Lawrence Livermore National Laboratory and Oak Ridge Y–12 Plant to NNSA.

—Transfer operation of the Nevada Test Site low-level waste disposal site to NNSA.

In addition, EM has completed active cleanup at the Laboratory for Energy-Related Health Research and is transferring the long-term response actions to the Office of Legacy Management (LM).

This budget request includes funds for the new national Consolidated Business Center (CBC) in Cincinnati, Ohio. The CBC will be the central clearinghouse for a wide range of activities supporting small sites and near-term closure sites.

The administration considers this budget request crucial to maintaining the successful trend of the past 3 years. Without your continued support, we could face higher risk to the environment and the public and lose the headway we have worked so hard to achieve. With your support, we will continue to produce measurable results that will last for years to come. We thank you for your trust and support, and plan on continuing to earn your trust in producing real risk reduction with future investments.

DELIVERING ON COMMITMENTS

A major priority is to eliminate accidents and injuries from the EM work. Our best performing sites are also our safest sites. EM is no different than any other industry; improved safety performance is a necessary precursor for improved operational performance. In order to accomplish our accelerated risk reduction and cleanup mission, we must improve safety performance first. Safety and results go hand in hand. Neither can be compromised if we are to reach our goals. We are committed to continue instilling this philosophy in every worker's day-to-day decisions.

In fiscal year 2004, EM has been able to:

—Complete packaging all excess plutonium into a safe long-term storage configuration. Performance is largely due to accelerated schedules at Savannah River and Hanford.

—Retrieve spent fuel from all aging water-filled pools and placing it into dry storage or modern, more robust storage pools.

Cumulatively, EM has accomplished the following (included are activities at the NNSA sites proposed for transfer):

—3,228 containers of enriched uranium (out of 9,101 containers required over the cleanup lifecycle) have been packaged and certified for long-term storage, 173 containers ahead of the accelerated schedule.

—9,057 metric tons of depleted uranium (out of 742,149 metric tons required over the cleanup lifecycle) have been packaged in a suitable form for disposition. The complex is cumulatively ahead of the accelerated schedule by 4,142 metric tons.

—615,473 cubic meters of legacy mixed low-level waste (MLLW) and LLW (out of 1,154,636 cubic meters required over the cleanup lifecycle) have been disposed. The complex is ahead of the accelerated schedule by 166,437 cubic meters because almost all sites have accelerated their schedules.

—Eliminate half of the Material Access Areas, highly secure and costly special nuclear materials storage areas, a significant reduction in fixed costs.

—911 out of 2,647 industrial facilities have been completed. The complex is cumulatively ahead of the accelerated schedule by 212 facilities.

—5,486 release sites (out of 10,374 release sites required over the cleanup lifecycle) have been completed. The complex is ahead of schedule by 144 release sites. Hanford, Savannah River, and Rocky Flats contributed greatly to the positive performance on this goal.

In addition, on a site specific level, we have:

—Completed packaging all (2,090 metric tons) of Hanford K-Basins spent nuclear fuel for final disposition and moved them well away from the Columbia River for long-term storage;

—Removed all pumpable liquids from the 149 single shell tanks at Hanford;

—Removed all spent nuclear fuel from three aging pools at the Idaho National Laboratory;

—Dispositioned 50 percent (124 out of 248) of the Oak Ridge Reservation facilities which include 2 nuclear facilities, 6 radiological facilities, and 116 industrial facilities;

—Removed all spent nuclear fuel from the West Valley Demonstration Project site to safe and secure long term off-site storage;

—Completed 35 percent of the Defense Waste Processing Facility mission by producing 1,712 out of 5,060 high-level waste canisters;

—Disposed of more than 18,300 cubic meters of transuranic (TRU) waste at the Waste Isolation Pilot Plant (WIPP), roughly 10 percent of the legislated 176,000 cubic meters capacity of WIPP; and

—Stayed on track to complete cleanup and closure of Rocky Flats, Fernald, and Mound and four other sites in 2006.

By completing these actions and reducing risks, the liability to the taxpayer is reduced and the environment for future generations will be safer.

CHALLENGES AHEAD

Many of the acute hazards to communities and the environment have been substantially reduced. And although we can and should feel proud about what we have done, real challenges still lie in front of us. While our nuclear materials stabilization mission is by and large completed, the EM program is evolving into a more a radiological and industrial facilities deconstruction program. For example, at the Portsmouth Gaseous Diffusion Plant in Ohio, EM is transitioning from cold standby operations to decontamination and decommissioning, a step consistent with the development of the new United States Enrichment Corporation Gas Centrifuge facility at Portsmouth.

In addition, we have uncertainties that challenge us such as end states for some sites, disposition paths for some wastes, and legal and regulatory issues. For example, the Department must:

—Successfully implement the path forward provided by section 3116 to disposition tank waste stored at Savannah River and Idaho, working with the Nuclear Regulatory Commission and State regulators;

—Initiate major procurement activities at Hanford and Savannah River in fiscal year 2006 to align cleanup work scope for these sites with our contracts, thereby bringing an even greater portion of the Department's cleanup work under contracts that better drive performance;

—Establish a disposition pathway for silos residues from the Fernald site, to allow that site to close in 2006;

—Address seismic design issues for the Waste Treatment Plant at Hanford, to ensure we build a plant that meets all design requirements;

—Resolve uncertainties that challenge our ability to clean up and dispose of radioactive wastes at our Department of Energy sites. The cleanup of the EM program requires us to work together cooperatively.

In front of us still remains a tremendous amount of risk reduction and environmental remediation, which is why this program still requires $6.5 billion in fiscal year 2006 to operate. In addition we have uncertainties that challenge us, issues like end states for some sites, disposition paths for some wastes, and legal and regulatory issues.

The Department is taking proactive steps in anticipating and addressing such challenges, challenges which are to be expected for a program as complex and diversified as EM. We have taken on challenges in the past. This experience gives us the confidence to take on what some may think are insurmountable issues. We will use our technical, legal, and regulatory resources and will work with Congress, affected Tribes, State and local authorities along with our community stakeholders to continue to provide to our nation the risk reduction and cleanup it expects and deserves. EM is and will continue to refocus new energy on resolving significant issues and safety performance as well as contract performance and integrated acquisition strategy, managing post cleanup liabilities, and human capital.

THE FISCAL YEAR 2006 BUDGET REQUEST

The investment we have requested in our fiscal year 2006 budget will continue the Department's success in achieving its mission of accelerated risk reduction and cleanup completion.

DOE's 2006 budget request for EM activities totals $6.5 billion. The request includes five appropriations, three of which fund on-the-ground, core mission work, and two of which serve as support. The five appropriations and associated requested funding are:

—Defense Site Acceleration Completion ($5.184 billion)

—Defense Environmental Services ($831 million) (Includes $451 million for the Federal contribution to the Uranium Enrichment Decontamination and Decommissioning Fund.)

—Non-Defense Site Acceleration ($172 million)

—Non-Defense Environmental Services ($178 million)

—Uranium Enrichment Decontamination and Decommissioning Fund ($591 million)

In building the request, the Department applied the following principles and priorities:

Protect workers, public, and the environment.—The budget request continues to place the highest priority on protecting workers, the public, and the environment. The implementation of EM's cleanup strategies allows for an overall improvement in safety and reduction in risk because cleanup will be completed sooner, reducing the extent to which workers, the public, and the environment have the potential to

be exposed. Over the past 3 years, improvements in safety performance have been demonstrated.

Ensure the appropriate levels of safeguards and security.—It is crucial that we maintain vigilance in our security to protect our citizens. The EM program is responsible for many tons of surplus nuclear material. There is an overall increase in the safeguards and security budget in fiscal year 2006 due to additional security requirements primarily at Hanford, but also Savannah River, Oak Ridge, Portsmouth, and Paducah, as a result of revisions to the Department's Design Basis Threat—the risk scenarios which each of our sites must plan to withstand.

Risk reduction and cleanup completion.—Accelerated risk reduction requires a pragmatic approach to cleanup and occurs in various stages, which involve the elimination, prevention, or mitigation of risk. Because safe disposal of many materials will take a number of years to complete, our major focus of risk reduction is stabilization of high-risk materials, including:

—High-curie, long-lived isotope liquid waste;
—Special nuclear materials;
—Liquid transuranic waste in tanks;
—Sodium bearing liquid waste in tanks;
—Deteriorating spent nuclear fuel in leaky or poor integrity basins;
—Remote-handled transuranic waste and high transuranic content waste; and
—Transuranic waste stored on the surface.

Although all of these items are to be considered when setting priorities, their relative ranking may vary from site to site. Risk reduction is a major consideration in the development of the site baselines. Examples of planned activities and milestones for fiscal year 2006 that correspond to site-specific risk categories are:

Hanford

—*Complete cleanout of K East and K West basins (sludge, debris, and water)*.—The K basins are located about ¼ mile from the Columbia River. This project involves removing radioactive sludge, debris, and water from wet storage in the K Basins to safe, interim storage or final disposition away from the Columbia River. The K Basin facilities are well past their design lives and are a major threat to the environment due to the potential for basin leakage to the surrounding soil and the Columbia River. Continued deactivation of the K Basins will support final turnover to the River Corridor Closure contractor. Their cleanout will decrease the risks posed by the basins to human health and the environment.

—*Complete remaining activities to support interim safe storage (cocooning) of the H-Reactor*.—Complete all remaining activities to support interim safe storage of the H-Reactor, provide safe storage for approximately 825 metric tons of unirradiated fuel in the 300 Area facilities and begin preparations for shipping the material offsite. The interim safe storage of the reactor and fuel will decrease the risks they pose to human health and the environment.

—*Complete dismantlement of 232–Z facility within Plutonium Finishing Plant (PFP) Complex to slab-on-grade*.—The PFP Complex consists of several buildings that were used for defense production of plutonium nitrates, oxides and metal from 1950 through 1989. The end state for the PFP is the dismantlement of all facilities to slab-on-grade. Progress will continue on the deactivation and decommissioning of the Plutonium Processing Facility, Plutonium Reclamation Facility, High-Level Liquid Waste Facility, Americium Facility and other nuclear facilities within PFP. Dismantlement of the 232–Z incinerator facility will be completed resulting in reduced risk to human health and the environment.

—*Accelerate the retrieval of suspect transuranic waste and shipments to the Waste Isolation Pilot Plant*.—Hanford has several thousand containers of previously generated suspect transuranic waste stored in the ground in a retrievable configuration. The retrieval of this waste will be accelerated from 1,500 m^3 in fiscal year 2005 to 1,800 m^3 in fiscal year 2006. Of the retrieved waste, more than 700 m^3 of transuranic waste will be shipped to the Waste Isolation Pilot Plant for final disposal. Characterization and shipment of this waste to the Waste Isolation Pilot Plant for final disposal will reduce the risks to facility workers as well as reduce the safeguard and security vulnerability associated with this waste. This action represents final disposal of this waste in an environmentally protective repository.

—*Prepare T Plant to support Tri-Party Agreement M–91 Milestone Requirement*.—T Plant will be utilized for support of various waste management missions including repackaging of mixed low-level and transuranic wastes. T Plant preparation supports the Tri-Party Agreement M–91 milestone requirements for repackaging of large/remote handled mixed low-level and transuranic wastes.

—*Complete upgrade of the remediation system for the 100–D Area Chromium Plume*.—Chromium-contaminated groundwater is reaching the Columbia River in the 100–D Area. The contamination levels are more than 20 times the aquatic life water standard, and the area is adjacent to potential salmon spawning locations. To address this, the ground water remediation system in the 100–D Area will be upgraded. As a result, the groundwater reaching the Columbia River will once again meet the aquatic water standards, thereby protecting human health and the salmon population in the River.

—*Complete construction of Integrated Disposal Facility and initiate treatment of selected low-level and transuranic wastes from single-shelled tanks*.—Radioactive liquid waste stored in older single-shelled tanks has the potential of leaking and contaminating soil and groundwater that flows to the Columbia River, presenting a risk to human health and the environment. Construction of the Integrated Disposal Facility will provide expandable, on-site disposal capacity for treated low-activity tank wastes, low-level and mixed low-level wastes. Treatment of selected low-level and transuranic tank wastes using supplemental treatment technologies such as bulk vitrification will allow early and accelerated treatment of tank wastes outside the Waste Treatment Plant currently under construction at Hanford.

Idaho

—*Complete the construction and startup repackaging facilities for remote handled transuranic waste, and disposition 6,800 m^3 of transuranic waste at the Waste Isolation Pilot Plant. Disposition 5,600 m^3 of low level and mixed low level waste*.—These actions will serve to reduce operating, surveillance, and maintenance costs while at the same time offering improvements in waste management and long-term safety and security.

—*Complete design and initiate construction of the Sodium Bearing Waste Treatment Project, to treat tank radioactive wastes*.—These actions support the EM goal of reducing the risk of stored liquid radioactive waste and support the 1995 settlement agreement with the State of Idaho. These actions will reduce the potential risk to human health by preventing the migration of contamination into the Snake River Plain Aquifer which is a sole source aquifer used to supply water to the people of southeastern Idaho.

—*Close one underground storage tank (WM–184)*.—This would be the first liquid waste underground storage tank closed since 1997. Removing the liquid waste decreases the risks they pose to human health and the environment, including the underlying Snake River Plain sole-source aquifer.

—*Initiate the deactivation of excess reactors and complete deactivation of the Power Burst Facility, building 620*.—These actions will reduce potential risk by deactivating high risk excess Idaho National Laboratory nuclear buildings that have reached the end of their useful lives.

Paducah

—*Continue construction of Depleted Uranium Hexafluoride (DUF_6) Conversion facility*.—The DUF_6 conversion facility will convert depleted uranium hexafluoride into a more stable form (depleted uranium oxide) suitable for reuse or disposition. Depleted uranium oxide will be disposed of at a licensed commercial facility, the hydrogen fluoride by-products will be sold on the commercial market, and the empty cylinders will be crushed and disposed of or reused.

—*Disposition 116 cubic meters of waste*.—The continued shipment and disposal of newly generated and legacy waste will proportionally reduce the risk such wastes present to the health and safety of workers and reduce the on-going potential for release to the environment from aging storage containers.

—*Continue decontamination and decommissioning of C–410 Complex*.—The C–410 Complex is a large chemical complex in a shutdown condition. Removal of contaminated materials and equipment reduces potential risk to onsite workers and represents a key step in stabilizing the facility such that contaminants are prevented from release to the environment.

Portsmouth

—*Complete Shutdown of Cold Standby Operations and transition to D&D*.—Planned transition from cold standby to final shutdown and subsequent decontamination and decommissioning activities. This will result in a significant mortgage cost reduction and will eliminate risk to public health and the environment.

—*Disposition 1,600 cubic meters of legacy waste*.—The continued shipment and disposal of legacy waste will proportionally reduce the risk such wastes present

to the health and safety of workers and reduce the on-going potential for release to the environment.

—*Operate active and passive groundwater treatment systems*.—Plume control keeps contaminants from reaching surface streams and off-site drinking water supplies. Trichloroethylene (TCE), which is an industrial solvent, is the main groundwater contaminant at the site.

—*Complete disposition of the Gas Centrifuge Enrichment Plant components*.—Complete shipment of 720 disassembled centrifuges, disposition all RCRA waste, and complete decontamination in certain Gas Centrifuge Enrichment Plant facilities. These facilities are to be used by the United States Enrichment Corporation (USEC) for development and deployment of an advanced centrifuge uranium enrichment plant.

—*Continue construction of DUF_6 Conversion facility*.—The DUF_6 conversion facility will convert depleted uranium hexafluoride into a more stable form (depleted uranium oxide) suitable for reuse or disposition. Depleted uranium oxide will be disposed of at a licensed commercial facility, the hydrogen fluoride by-products will be sold on the commercial market, and the empty cylinders will be crushed and disposed of or reused.

Oak Ridge

—*Continue demolition of the K–25 and K–27 buildings and process equipment removal*.—Decommissioning the buildings will reduce the footprint of the site, and therefore reduces significant fixed costs and risks to the workers by eliminating the need to enter the buildings to perform required, routine surveillance and maintenance activities. Decommissioning the buildings also eliminates the potential environmental and human health risk of accidental releases from these facilities.

—*Initiate the construction of the final expansion of the Environmental Management Waste Management Facility (EMWMF)*.—Construction of the final expansion of the EMWMF represents an important step in the completion of environmental cleanup at the Oak Ridge Reservation. Waste received from remedial action/decontamination and decommissioning projects from all of the Oak Ridge Reservation will be placed in the engineered disposal facility. Disposition of this waste will greatly decrease the risks to public health and the environment.

—*Complete Melton Valley cleanup*.—Completion of Melton Valley cleanup in fiscal year 2006 will ensure that the largest source term threatening the nearby Clinch River is contained, on-site surface water quality is improved to meet required standards, and off-site users of the Clinch River remain protected.

—*Complete shipment of DUF_6 cylinders to Portsmouth*.—This will complete the removal of all remaining cylinders from the East Tennessee Technology Park in accordance with the Tennessee Department of Environment and Conservation Order.

—*Initiate contact-handled transuranic waste processing at the Waste Treatment Facility*.—This waste is stored in above grade-storage facilities and in earthen trenches. Processing the waste prevents the risk of release to the environment and the continued cost of waste storage and monitoring.

—*Complete Offsite Remediation. Complete Atomic City Auto Parts. Complete building and debris removal at Witherspoon 901 sites*.—This action will reduce the risks posed to workers and the surrounding community from uranium and polychlorinated biphenyls contamination in the soil.

Los Alamos National Laboratory

—*Disposition 1,400 cubic meters of legacy transuranic waste and initiate retrieval of legacy transuranic waste storage above ground*.—Characterization and shipment of this waste to the Waste Isolation Pilot Project for final disposal will reduce the risks to facility workers as well as reduce the safeguard and security vulnerability associated with this waste. This action represents final disposal of this waste in an environmentally protective repository.

Savannah River Site

—*Complete processing neptunium solutions*.—SRS has approximately 6,000 liters of neptunium-237 nitrate solution in H-Canyon. Through processing, the neptunium solutions are converted into a more stable form, and the risks they pose to human health and the environment are reduced.

—*Complete de-inventory and deactivation of the F-Area nuclear materials processing facilities*.—Complete de-inventory and deactivation of the F-Area nuclear materials processing facilities including F Canyon, FB Line, and F Outside Facilities. In addition, complete the stabilization and packaging of plutonium to DOE Standard 3013 in FB Line. This will greatly reduce the security threat

and the large fixed costs associated with these facilities as well as the risk posed to human health and the environment.

—*Continue to stabilize liquid waste from underground storage tanks*.—Complete design and begin construction of Salt Waste Processing Facility; produce 250 canisters of vitrified high-level waste.

—*Complete decommissioning of 28 industrial, nuclear, and radioactive facilities, including the completion of M Area Facilities*.—Decommissioning excess radioactive facilities will reduce the footprint of the site and associated fixed costs, and therefore collectively reduce risk to the worker by eliminating the need to enter the facilities to perform required, routine surveillance and maintenance activities. Risk of worker exposures while performing these activities is eliminated. Decommissioning excess radioactive facilities also eliminates the potential environmental and human health risk of accidental releases from these facilities.

Brookhaven National Laboratory

—*Complete removal of Brookhaven Graphite Research Reactor Canal and continue Reactor Pile removal*.—Brookhaven National Laboratory sits over a sole-source aquifer used as a primary source of drinking water for the people of Long Island. Decontamination and decommissioning of the Brookhaven Graphite Research Reactor activities for fiscal year 2006 will remove the Canal and the Graphite Pile, both highly contaminated components from the reactor; contaminated soils adjacent to the reactor will also be removed. These actions will reduce the potential risk to human health by eliminating a possible source of contamination to the aquifer.

Waste Isolation Pilot Plant

—*Begin receipt and placement of remote-handled transuranic waste*.—The Waste Isolation Pilot Plant, in Carlsbad, New Mexico, is the Nation's mined geologic repository for the permanent disposal of defense-generated transuranic waste. All transuranic waste comes to the Waste Isolation Pilot Plant for receipt, handling, and disposal. WIPP is not permitted to receive and dispose of remote-handled transuranic waste (defined as such because it generates higher levels of radiation). The permitting activities this year, which come from the combination of many years of regulatory, scientific and engineering efforts, will enable WIPP to receive remote-handled waste by June 2006. This will remove these wastes from around the complex where it constitutes a major health and safety risk, into a centralized, safe disposal site in New Mexico.

Maintain closure schedules.—Three major sites, Rocky Flats, Fernald, and Mound, have accelerated closure schedules. In addition, two smaller sites, Ashtabula and Battelle-Columbus are scheduled to close in 2006. Funding in the fiscal year 2006 budget will allow these sites to remain on track toward project completion and site closure.

At Rocky Flats, fiscal year 2006 funding provides for:

—*Completing the disposal of legacy low-level and mixed low-level waste to off-site disposal; completing remediation of all remaining release sites*.—During fiscal year 2006, Rocky Flats will be completing their commitment of site closure and conversion of the Rocky Flats site for future beneficial use. All of the legacy waste as well as amounts generated by remediation will be disposed of off-site in DOE or commercial disposal facilities. Remediation will be completed on all remaining release sites including building foundations and ponds. Site recontouring and grading will be completed along with all necessary regulatory and project closure documentation.

—*Completing nuclear facility deactivation and decommissioning for all nuclear as well as non-nuclear buildings on site*.—All the buildings where plutonium and other hazardous materials were used in support of the nuclear weapons deterrent, which constitute over 1,000,000 square feet of space, will be demolished. All final quantities of radioactive wastes will be removed from the site, and the grounds will be receiving the necessary remediation action. These actions, when complete, will allow the Department of Energy to release the site to the U.S. Fish and Wildlife Service to become the Rocky Flats National Wildlife Refuge with little or no further risk to human health or the environment.

At Fernald, fiscal year 2006 funding provides for:

—*Completing decontamination and decommissioning of Silos 1, 2, and 3 treatment facilities and associated support structures/facilities*.—Silos 1 and 2 contain the highest levels of radiological activity residing in any waste stream at the site, a risk to human health and the environment. The Silos 1 and 2 Project con-

stitute the Site Closure Critical Path. Their successful completion is a prerequisite for a timely and safe closure.

—*Completing construction of the On-Site Disposal Facility Cells 6 and Cell 7 caps, contaminated soil excavation, expansion and capping of Cell 8, and natural resource restoration*.—Completing soil excavation, disposal into the onsite cells, and capping the cells of the On-Site Disposal Facility (OSDF) will insure the reduction in risk to human health and the environment during post closure. Overall, the OSDF will be composed of 8 cells, containing 2.5 million cubic yards of waste soil and debris. The OSDF has been designed and engineered to possess a 5-foot thick liner and a 9-foot thick cap. The OSDF has a design life of 1,000 years.

At Mound, fiscal year 2006 funding provides for:

—*Completing the excavation and verification of Potential Release Site 131 (soil beneath Buildings R, SW, and B Slab) and the remaining Potential Release Sites and ship the remaining remediation waste for off-site disposal, and transfer remaining land to the Miamisburg Mound Community Improvement Council*.—Completing Potential Release Site 131 decreases risk by preventing any further radioactive contamination from migrating into clean soil areas and ground water, by reducing potential exposure to site workers and other personnel located on site, and by precluding any potential environmental impacts to off site areas.

At Ashtabula, fiscal year 2006 funding provides for:

—*Completing remediation of the Waste Management Unit*.—Remediating the Waste Management Unit significantly reduces the remaining risks of organic and inorganic chemical exposure to both soil and groundwater at the RMI site.

At Battelle-Columbus, fiscal year 2006 funding provides for:

—*Completing demobilization of equipment and site infrastructure to support closure and complete off-site disposal of transuranic waste*.—Demobilization of the remaining equipment and infrastructure will support final closure of the site. Removal of the transuranic waste will also reduce risk to off-site areas and members of the general public.

CONCLUSION

Three years ago we started down the path to bring clarity and focus to our mission and deliver on our commitments. We must continue to improve our performance and look beyond the gains we have made to achieve our vision for the benefit of future generations. I have challenged our partners in cleanup: our workforce, our contractors, our regulators, our communities, and all those interested in joining us in our vision of cleanup to put their most innovative ideas and people forward. We must not lose the momentum that has been established, particularly as we work through the tremendous challenges that still face us. This program spends nearly $1 million per hour, 24 hours per day, 7 days a week. The question is how we continue to return value to the communities and taxpayers with this program. We are committed to using our resources to show meaningful risk reduction and cleanup completion results.

We must never go backwards, to the time when we measured success by how much we spent, not by how much we did. We must never again believe the falsehood that it is a choice between being safe and doing work, for it is only when we do our work that we are really safe. We must not by our inaction allow this legacy to become our children's, grandchildren's, or our great-grandchildren's problem . . . it is for us to solve and for us to complete. We must demand excellence and never again accept the notion that this job is too hard or too dangerous to complete. We have demonstrated that we can do this work, that we can do it safely, and that we can do it on a schedule to be completed in our lifetime.

The challenges before us are formidable. To solve them will require our collective resources, ingenuity, and hard work. But we are up to this challenge. Over the last 3 years, EM has demonstrated that challenges can be overcome.

Again, I thank you for the support you have provided these last few years, and I ask for your continued support in this very important work. The potential is there to lose what we have gained should we fail to stay true to our commitments: a cleanup that is safe for the worker, protective of the environment, and respectful of the taxpayers.

I look forward to working with the committee and others to achieve this worthy goal.

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

STATEMENT OF THEODORE J. GARRISH, DEPUTY DIRECTOR

Mr. GARRISH. Mr. Chairman, members of the committee, I am Ted Garrish, Deputy Director of the Department's Office of Civilian Radioactive Waste Management. I'd like to thank the committee for inviting me here to discuss our program, and in the interest of time, I'd like to cut down a little bit on some of my remarks.

As you know, it is a priority of this administration to consolidate waste currently at 125 sites in 39 States to a single, secure, remote location. We remain committed to our obligation to safely dispose of spent fuel and high-level radioactive waste resulting from commercial nuclear power and defense activities.

First, as I begin, I'd like to address some of the opinions that have been offered to the effect that the program is unable to move forward. Some people have suggested that it's even broken. On the contrary, this program has a sound, scientific, and technical basis, and we are moving forward step by step toward the development of a repository at Yucca. I believe we are better situated than we have ever been to move forward with this program, and let me describe a couple of the reasons.

First and foremost, we have a site for the repository. Congress approved the Yucca Mountain site in 2002, and the courts have affirmed the constitutionality of the site selection process and we have a location for the repository. Secondly, we have a draft of the entire license application in hand and we are making improvements to the analysis to provide a high quality presentation by the end of this calendar year.

To this end, we have submitted 293 of the key technical issue agreements to the Nuclear Regulatory Commission, and they are in the process of reviewing them. Two hundred and nine have been closed. We are improving our computer models to reflect the conditions in the future. We have provided over 1 million documents, which is 5 million pages, to the Nuclear Regulatory Commission for their web site for interested parties to review the license application and related material. We currently estimate that we have approximately 3.7 million documents to put into the licensing support network and we are approximately 44 percent complete.

We have had positive exchanges with the Nuclear Waste Technical Review Board ranging from groundwater flow to the waste package corrosion. All told, the license application process is going well.

Third, the transportation program in Nevada and throughout the country is moving forward in earnest. The EIS process for the Nevada rail alignment is well along in the process, and we expect the draft EIS to be completed in the near future. And we have begun our institutional activities with getting tribes and States as our partners around the country. These are all positive developments

demonstrating that we are making progress. Nevertheless, the program does face challenges involving parties outside the Department. These include the court decision on the EPA standard and the need for funding reform.

Last summer, as you know, the U.S. Court of Appeals vacated EPA's Yucca Mountain radiation protection standard with regard to the 10,000 year regulatory compliance period. EPA is currently preparing a radiation standard to conform with the court's direction. We remain optimistic that EPA's work in promulgating the standard will be contemporaneous with our work on the license application, and both will be ready by the latter part of this year.

In addition, we are facing serious funding issues for the future. Both Congress and the administration have recognized the funding program facing the program and have desired to make the nuclear waste money—fund monies available for their intended purpose. To ensure sufficient and stable funding, the administration remains supportive of the concept embodied in our legislative proposal submitted last year, and the administration remains interested in pursuing further discussions with Congress on these issues in the hope of reaching some agreement that will assure access to the nuclear waste fund when that money is needed.

Despite these challenges, the program is on sound footing and we are poised to make significant progress in the coming years. In the current fiscal year 2005, there have been several important objectives, mainly to focus on refining and completing the license application. Supporting that, we are continuing to work on the design of the waste package, the surface and sub-surface facilities, and to complete the total system performance assessment.

We anticipate completing the certification of the licensing support network mid-summer, preparing millions of pages of documentation for the public. And on transportation, we are anticipating completing the draft EIS of the Nevada rail and completing the conceptual design of that rail objectives in fiscal year 2005.

Fiscal year 2006 is a critical period for the Department. We will be submitting our license application and we will begin the NRC regulatory process leading to the issuance of the construction authorization. As we submit the license application and as we proceed, we are going to need to advance the repository design. We will need to support the NRC review and to support our defense of the license application.

For transportation, we will need to continue with our design and pre-construction activities for the Nevada rail and to develop cask and railroad cars used to develop waste. Our budget request of $651 million represents a modest increase in funding to complete the tasks we believe can reasonably be accomplished in fiscal year 2006. We will continue to make real progress on the license and the repository and the development of the national infrastructure for accepting and transporting waste, and we urge your support for our budget request, and we're pleased to work with you on the various issues that should come up in fiscal year 2006.

PREPARED STATEMENT

Finally, I cannot emphasize enough the administration's continued strong support for this program as we move forward with the

implementation. And I will be happy to respond to your questions. Thank you.

[The statement follows:]

PREPARED STATEMENT OF THEODORE J. GARRISH

Mr. Chairman and members of the committee, I am Ted Garrish, Deputy Director of the Department of Energy's (DOE) Office of Civilian Radioactive Waste Management (OCRWM). I appreciate the opportunity to present our fiscal year 2006 budget request and discuss our plans to license, build, and operate a geologic repository at Yucca Mountain in Nevada, and our efforts to develop the transportation system needed to deliver spent nuclear fuel and high-level radioactive waste to the repository.

There has been a lot of comment about this Program being unable to move forward. On the contrary, the Program is as well situated as it has ever been. Indeed, we are in excellent shape for the future and we are moving ahead deliberately, step-by-step, toward development of a geologic repository at Yucca Mountain. Here are some of the reasons why this Program is poised for success:

—We have a site for the geologic repository. Congress approved the Yucca Mountain site in Nye County, Nevada for development as a repository in 2002. Lawsuits have affirmed the constitutionality of the process and therefore we have a location for the development of a repository.

—We have a draft of the license application in the process of refinement. We are making improvements to the analysis and presentation of information to meet one objective of completing preparation of a high quality license application by the end of this calendar year.

—Transportation activities have begun in earnest. We issued Records of Decision for both transportation mode and the rail line corridor through Nevada. We are currently preparing an Environmental Impact Statement for the specific rail alignment within that corridor. Institutional activities to include the States as partners have also begun.

—We are requesting the full funding amount needed to complete those tasks we can reasonably accomplish in fiscal year 2006. The Department will continue to request the appropriate funding required for the project.

—The administration continues its strong support of this Program as we move forward with its implementation.

This Program does face a couple of challenges involving parties outside the Department that I would like to briefly bring to your attention.

First, the U.S. Court of Appeals for the District of Columbia Circuit vacated the Environmental Protection Agency's Yucca Mountain radiation protection standard with regard to its 10,000 year regulatory compliance period. EPA is currently working to revise its Yucca Mountain radiation standard to conform to the court's direction. We remain hopeful that EPA's work in promulgating the standard will be contemporaneous with our work on the license application and that both will be ready by the latter part of the year.

Second, both Congress and the administration have recognized the long-term funding problem facing the Program and the need to make Nuclear Waste Fund monies available for their intended purpose. The administration believes that the fees currently paid to the government by utilities to finance the repository should be treated as offsetting collections against the appropriation from the Nuclear Waste Fund. The amount credited as offsetting collections should not exceed the amount appropriated for the repository. To ensure stable and sufficient funding, the administration continues to support the concept embodied in the legislative proposal submitted last year to provide the increased annual funding needed for construction and operation of the repository. The administration remains interested in pursuing such a proposal and intend to have further discussions with Congress on these issues in the hope of reaching some agreement.

Despite these challenges, the Program is fundamentally on sound footing and we are poised to make significant progress in the coming year.

THE FISCAL YEAR 2006 BUDGET REQUEST

Fiscal year 2006 is a crucial period for the Department and for the regulatory process leading to issuance of a construction authorization for the Yucca Mountain Project. To accomplish our goals, the budget request $651 million for the Program in fiscal year 2006. A significant portion of the work planned for fiscal year 2006 is required to advance the repository design and facilitate construction and operation, and to support the NRC's review and the Department's defense of the license

application. In addition, funding will also support design and pre-construction activities for the approximately 300-mile Nevada branch rail line. The Department will also continue to support development of transportation casks and railroad cars capable of delivering spent fuel and high-level waste to the repository.

To set the stage for our fiscal year 2006 budget request, I would like to describe briefly OCRWM's fiscal year 2004 accomplishments and our ongoing activities based on our fiscal year 2005 appropriation.

FISCAL YEAR 2004 ACCOMPLISHMENTS

Having achieved Congressional and Presidential approval of the Yucca Mountain site in 2002, we have transitioned from a scientific study program to one focused on the regulatory requirements for obtaining a license from the NRC to construct and operate the proposed repository.

Over the past 2 years the main effort of the program has been preparation of the license application for submittal to the NRC. The majority of the funding for the Yucca Mountain Project in fiscal year 2004 was devoted to various aspects of the license application. While a solid working draft had been received, the Program elected to take the time afforded by the vacating of the EPA standard to strengthen the license application and ready it for submission in calendar year 2005. The Program has established plans for completing and further strengthening the license application and has based its funding request upon these plans.

The Program prepared a design and a detailed plan for repository licensing, construction, and operation, and focused on completing the license application to the NRC for authority to construct the repository. By the end of fiscal year 2004, the Yucca Mountain Project had accomplished the following:

—Completed required elements of the design of the waste package and repository facilities in support of the license application.

—Addressed all "key technical issue" agreements that the Department and the NRC had agreed needed to be addressed prior to license application submittal.

—Prepared tens of millions of pages of relevant documentation for inclusion in the electronic Licensing Support Network.

—Prepared a draft license application for construction of the repository facilities needed to begin acceptance of spent fuel and high-level waste.

—Institutionalized a Science and Technology Program to enhance the understanding of the repository system and potentially reduce the Program's cost and schedule.

In addition, during fiscal year 2004, the OCRWM Office of National Transportation completed conceptual design and project management documentation needed to support cask and rolling stock acquisition and rail line design and construction, issued a Record of Decision to use the mostly rail mode of transportation, and issued a second Record of Decision selecting the Caliente corridor for the Nevada branch rail line.

FISCAL YEAR 2005 ONGOING ACTIVITIES

Yucca Mountain Project

Consistent with Departmental and Program objectives, the Yucca Mountain Project's main focus in fiscal year 2005 is on improving and completing the license application. The required elements of design, performance assessment, safety analyses, and technical data in the license application must be sufficient for the NRC to conduct an independent review and reach a decision to issue a construction authorization. The application must demonstrate that the repository can be constructed and operated and that the health and safety of the public will be protected.

By the end of fiscal year 2005, with the funds appropriated, our objectives are to:

—Make significant progress on and improvements to design for the waste package, surface facilities, and subsurface facilities in support of the license application.

—Complete total system performance assessment calculations and final report in support of the license application.

—Complete certification of the electronic Licensing Support Network consistent with the requirements of 10 CFR Part 2, Subpart J, by preparing tens of millions of pages of relevant documentation to support review of the license application.

Even though site characterization is complete, in fiscal year 2005 we are continuing to collect valuable scientific information, including for the Performance Confirmation baseline. The NRC requires scientific analyses in support of Performance Confirmation to continue until the repository is permanently closed.

National and Nevada Transportation Projects

In early fiscal year 2004, the transportation program focused on selecting the transportation mode and the corridor for the Nevada branch line that would establish the transportation system's infrastructure requirements. In April 2004, the Department announced the Record of Decision for the selection of rail as the mode of transportation and a second Record of Decision for the selection of Caliente corridor for construction of a branch rail line in Nevada to connect from an existing rail line to the Yucca Mountain site. The program is now planning and developing designs for infrastructure development projects to provide the capability for transporting spent nuclear fuel and high-level waste to the repository. Funding in fiscal year 2005 supports completion of the conceptual design process and issuance of the draft Rail Alignment Environmental Impact Statement for the transportation system in Nevada. Funding also supports initial investments in transportation infrastructure needs, including transportation casks, railroad rolling stock, operations planning, and the business systems needed to manage multiple procurements and construction projects.

Program Management and Integration

A key component of the Program Management and Integration budget element is Quality Assurance (QA). In the last year we continued to make progress in the implementation of our QA program requirements. Several independent assessments have determined that the QA program is being effectively implemented.

During this fiscal year, we continue to take steps to ensure we are prepared to manage major capital projects efficiently and cost-effectively. We submitted an updated Capital Asset Management Plan for the Program to the Office of Management and Budget and the Congress in November 2004 and have completed a comprehensive program acquisition strategy. We continue to strengthen our performance measurement and project management capabilities and systems, and have institutionalized their use in monitoring and managing all the activities that support license application completion. We continue to implement the President's Management Agenda.

In fiscal year 2005, the Science and Technology Program continued work in the areas of repository materials performance, applied research on the Yucca Mountain geologic environment, and methods for developing new substances that will selectively capture waste elements. Additionally, projects will be initiated to examine advanced welding technologies, development of innovative materials for potential use in waste packaging and the repository's tunnels, and the potential application of additional advanced remote handling and robotics technologies in the repository system.

FISCAL YEAR 2006 KEY ACTIVITIES

Yucca Mountain Project

Fiscal year 2006 is a crucial period for the Department and for the regulatory process leading to the NRC's issuance of a construction authorization for the Yucca Mountain Project. After submittal, the NRC is expected to start the docketing review and if, docketed, a detailed technical review of the license application. Docketing of the application will initiate adjudicatory proceedings on the license application. A significant portion of the work planned for fiscal year 2006 is required to advance the repository design and facilitate construction and operation, and to support the NRC's review and the Department's defense of the license application. Departmental activities encompassed within this work scope are premised on meeting NRC requirements and obtaining any necessary regulatory approvals.

The Department will be required to respond to technical questions and requests for additional information from the NRC in a timely fashion. The Department will also be required to appear at the evidentiary hearings that are likely to begin by fiscal year 2007 following the completion of the Commission's review of the license application and issuance of its Safety Evaluation Report on that application. The NRC is expected to issue a final decision on a construction authorization for the repository 3 to 4 years after submittal of the license application, the statutorily established time period.

In parallel with the licensing process, the Program must focus on design of the repository must and ensure that the site is ready to support construction as soon as it is authorized by the NRC.

By the end of fiscal year 2006, our objectives are to have:

—Completed the preliminary design for the waste package, surface facilities, and subsurface facilities, which requires continuing performance assessment analysis.

—Completed and submitted a license application for repository construction authorization to the NRC.
—Responded to NRC's initial Request for Additional Information as they review the license application.
—Updated the LSN certification concurrent with license application submittal.
—Continued to refine the safety analysis as needed, in response to NRC review and in accordance with NRC licensing regulations.
—Fabricated prototype waste packages to ensure a process that is replicable while meeting rigid quality assurance requirements.
—Initiated procurement activities for materials, equipment and services needed for construction of the surface and underground facilities.
—Completed upgrades of existing facilities needed for site safety.
—Developed designs for site infrastructure facilities and utilities needed to support the start of construction.
—Completed the detailed work plan, cost estimate, and schedule, and established a performance baseline for the final repository design and construction.

We are requesting funding for payments-equal-to-taxes to the State of Nevada and to Nye County, Nevada, where Yucca Mountain is located. Our fiscal year 2006 request also includes funding for Affected Units of Local Government, as well as funding to the University System of Nevada and to Nye County and Inyo County, California, for independent scientific studies. The increased request for State and local government oversight represents a one-time adjustment in the funding cycle to align with State and county fiscal years.

National and Nevada Transportation Projects

The requested funding will support the initiation of design and pre-construction activities for the branch rail line through Nevada as well as initial procurement of railroad cars, transportation casks and auxiliary equipment and will accelerate operational capability.

For Nevada Transportation, DOE plans to issue the Final Rail Alignment Environmental Impact Statement and issue a Record of Decision identifying the alignment within the selected corridor on which the railroad may be built. The Department expects to complete the preliminary design and award a design/build contract for completion of the design and actual construction of the rail line and associated support facilities. Procurement of long lead-time rail construction materials, including track way and auxiliary equipment, will also be initiated.

The National Transportation Project encompasses overall system planning, procurement of casks and rolling stock or railroad cars, and stakeholder relations activities. Significant lead time is required for solicitation, evaluation of proposals, NRC certification (for new designs), and fabrication of transportation casks. The initial procurement of transportation casks is needed to provide the capability for waste acceptance to support repository operations. We are working with the cask vendor industry to procure an efficient cask fleet that maximizes the government's ability to support the full range of contents that need to be shipped with the minimum number of separate designs. These procurements will proceed towards cask fabrication in a step-wise manner to maintain flexibility on final procurements as long as possible. We will also continue to address a new railcar standard implemented by the American Association of Railroads for shipments of spent nuclear fuel and high-level waste. Finally, the Program will conduct conceptual design activities for transportation support facilities, most significantly for the Fleet Management Facility which will provide cask and railcar maintenance capabilities during operations.

The National Transportation Project will also continue to expand its efforts to engage a wide range of stakeholders with regard to establishing preliminary transportation routes, operating protocols, and safeguards and security activities. The Department will work with key stakeholders to identify a suite of potential transportation routes, and we will continue to support State regional groups and tribes to develop a policy for funding State and tribal emergency response training and technical assistance as required by Section 180(c) of the NWPA.

Program Management and Integration

The budget request reflects the Program's need to have the strongest possible Quality Assurance program as it moves into the licensing phase. Quality Assurance is the cornerstone in assuring that the Program has successfully implemented the radiological safety and health and waste isolation activities required by NRC regulations. We will continue to institutionalize a nuclear safety culture by completing efforts introduced through the Management Improvement Initiative to meet the NRC's expectations of its licensees.

The fiscal year 2006 request also contains funding for systems engineering and analysis activities to enable us to better evaluate and optimize the Program's component elements as they begin to converge into a single waste management system. In addition to the repository and transportation readiness, the third key piece that must be put in place is waste acceptance readiness. That is, the Program must establish the "pipeline" of wastes destined for Yucca Mountain. By addressing waste acceptance issues now, we can ensure that repository facilities and transportation infrastructure will be compatible with the commercial spent nuclear fuel and DOE-managed wastes that are planned for receipt. OCRWM will work closely with the Office of Environmental Management on DOE spent nuclear fuel and high-level waste acceptance criteria to ensure that we have an integrated, timely, and cost-effective approach.

Requested funding in fiscal year 2006 for the Science and Technology Program reflects the Department's continuing commitment to enable the repository system to take advantage of the very latest scientific discoveries and technologies that may be potentially applicable over the long life of the repository.

Program Direction

The Program Direction budget request supports Federal salaries, expenses associated with building maintenance and rent, training, and management and technical support services, which include independent Nuclear Waste Fund audit services and independent technical and cost analyses. The increased request (approximately 2.5 percent) reflects a small increase in Federal staff expenses to manage additional repository design/licensing activities and National and Nevada transportation work.

ENSURING ADEQUATE RESOURCES TO COMPLETE THE MISSION

The Department of Energy and the Congress have been aware for many years that funding requirements for the repository program would increase substantially as we approach construction and transportation system development. In fiscal year 2007 and beyond, the Program will need significantly increased funding to pay for the design, construction, and operation of the repository, and for acquisition and development of the transportation infrastructure. Much greater certainty of funding is needed for such a massive capital project to ensure proper and cost-effective planning and acquisition of capital assets. Delays simply increase costs without meeting the Federal responsibility for safe, secure disposal of the waste.

In accordance with the funding approach established in the Nuclear Waste Policy Act, the Department collects annual fees from nuclear utilities for the disposal of their spent nuclear fuel. The fees are reflected in the utility bills that their customers receive. In fiscal year 2006, an estimated $752 million will be collected. We should not delay in making these resources available for their intended purpose.

The administration believes that the fees currently paid to the government by utilities to finance the repository should be treated as offsetting collections against the appropriation from the Nuclear Waste Fund. We will continue to work within the administration and with our Congressional counterparts to afford sufficient available funding to meet Yucca Mountain's programmatic requirements.

COST REDUCTION INITIATIVES

While addressing the funding needs of the Program is a high priority, we also believe that by looking at several system enhancements we can improve both the near-term and long-term funding outlook. With this goal in mind, we are looking at potential enhancements that can be achieved through phased development, technical alternatives, and acceleration of operations.

Under a phased development approach to repository construction, we have divided the surface and underground facilities into several phases so that the repository can be constructed and operated in stages. The license application will address all facilities necessary to emplace 70,000 metric tons of spent nuclear fuel and high-level radioactive waste, and will describe the incremental process for building those surface and underground facilities in modules and panels. In addition to controlling short-term cost spikes, this strategy will increase confidence in our ability to accelerate operations, allow experience from initial operations to guide later activities, and retain flexibility for the incorporation of future technology improvements.

We are making investments today in science and technology that will result in life-cycle cost savings, schedule efficiencies, and improved understanding of the safety and security of the repository system. To date, we have identified potential cost savings opportunities totaling several billion dollars over the long operating life of the repository in areas such as welding, advanced materials, techniques for excavating the underground tunnels, and low-maintenance ground support. While cur-

rent technology and technical information are adequate to support the license application, we believe that strategic investments today can yield substantial benefits over the long term.

CONCLUDING REMARKS

We are committed to the goal of beginning to receive and transport spent nuclear fuel and high-level waste to an NRC-licensed repository. Toward that end, our objective is to complete a high-quality license application and have it ready to submit to the NRC in December of this year.

We are requesting a moderate increase in funding in fiscal year 2006 to continue progress on licensing and constructing a geologic repository and developing the national infrastructure for accepting and transporting spent nuclear fuel and high-level waste. After more than 20 years of scientific study, a site approval process involving the Department, the State of Nevada, Congress, and the President, and purposeful efforts toward securing a license, we are on the edge of the licensing and construction phase of this Program. We urge your support for our budget request, and we are pleased to be able to work with you on this important national issue.

ADDITIONAL COMMITTEE QUESTIONS

Senator DOMENICI. I'm getting fairly short of time because I believe it's unfair for me not to be at the Budget Committee hearing, and you have the same situation. I assume you're going to submit some questions.

Senator MURRAY. I will submit my questions.

Senator DOMENICI. I think what I'm going to do, I have some on both issues, I'm going to submit them.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

OFFICE OF ENVIRONMENTAL MANAGEMENT

NATIONAL ACADEMY OF SCIENCES STUDY

Question. Last week the National Academy of Sciences panel published a report that evaluated the risk-based approach DOE utilizes in making cleanup and disposal decisions for transuranic and high level waste. The study made a number of findings. I am interested in Finding #7, which found that "DOE's planning and decision making is reduced by the apparent conflict of interest created by DOE's authority to propose and approve disposition plans for radioactive waste." The NAS suggested that as an alternative, DOE have either EPA or the NRC serve as an independent regulator.

As outlined in this finding, it would appear that the Department doesn't have any oversight or limitations on its ability to characterize and dispose of transuranic and high level waste. That isn't the case, is it?

Answer. Actually, several entities provide oversight or review of the Department's plans and operations for characterizing, retrieving, treating and disposing of transuranic (TRU) and high-level waste (HLW). The U.S. Environmental Protection Agency (EPA) is responsible for certifying all TRU waste streams to be disposed at the Department's Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico. Additionally, the New Mexico Environment Department must approve permit modification requests for certain new TRU waste streams proposed for disposal in WIPP. State environmental organizations provide oversight of certain HLW management functions conducted at DOE locations, including granting environmental permits for HLW treatment facility operations. Both the EPA and the U.S. Nuclear Regulatory Commission (NRC) have a regulatory role in the disposal of HLW. EPA specified the radiation protection standards that a HLW repository is required to meet. The NRC will license the construction and operation of a HLW repository that meets the radiation protection standards. The Defense Nuclear Facilities Safety Board (DNFSB) provides oversight of activities related to operation of defense facilities to ensure adequate protection of public health and safety. Much of DOE's TRU and HLW are defense wastes, and consequently many of the facilities used for retrieving and treating such wastes for disposal are under DNFSB oversight. Additionally, the

U.S. Department of Transportation prescribes regulations for the transportation of radioactive materials that the Department must meet for the packaging and shipping of its treated HLW and TRU from its generation sites to disposal sites.

Question. Do you believe the NAS finding has any merit, and is the Department considering using an independent arbiter to review DOE disposal plans?

Answer. The Department agrees with the approach to independent oversight of cleanup and disposal decisions for transuranic (TRU) and high-level waste (HLW) provided by the U.S. Environmental Protection Agency (EPA) and the State for TRU, and the U.S. Nuclear Regulatory Commission (NRC), EPA, the States, the Defense Nuclear Facilities Safety Board and the U.S. Department of Transportation in connection with HLW. For example, provisions of section 3116 of the National Defense Authorization Act for fiscal year 2005 call for a consultation role by the NRC, and stipulate a State-approved closure plan or State-issued permit for such wastes that the Secretary determines not to be HLW in accordance with section 3116. In addition, for wastes not subject to section 3116, DOE would continue its past practices of providing for independent review of such determinations by the NRC, and work with the host States to obtain necessary permits and approval of associated plans, such as closure plans. In these cases, both NRC and the States act as independent arbiters.

Question. Several of the findings of the National Academy of Science study determined that "it is infeasible to recover and dispose of every last bit of waste that might be classified as transuranic or high level." It also found that the cost and potential exposure of trying to recover every last gram of waste was not justified by the actually [sic] risk reduction. While the NAS study seems to favor the Department's decision to use a risk-based approach to cleanup, the report was very critical of the Department's lack of effort in seeking input from stakeholders and the public. How do you respond to this assertion that the Department has failed to include public participation and stakeholder input?

Answer. One of the keys to the Office of Environmental Management's (EM) progress in recent years has been its public outreach and stakeholder programs. This allows for substantive input into decision-making, and promotes proactive and systematic complex-wide public involvement. EM has a long history of working with a variety of intergovernmental groups (i.e., Energy Communities Alliance, Environmental Council of the States, National Association of Attorneys General, National Governors Association, and the State and Tribal Government Working Group) as well as with EM's Site-Specific Advisory Boards. The End States initiative is just one of many issues, including waste disposition, long-term stewardship, and natural resource damage assessments, that DOE and EM are working on with their various stakeholders.

The National Academy of Sciences' study was rightly critical of the lack of appropriate involvement by the public in the early stages of the EM End States (formerly the Risk-Based End States) initiative. However, beginning with the End States Workshop held in Chicago, Illinois, in October 2004, EM has increased stakeholder and regulator interactions. As a result of the Chicago workshop, EM formed an End States Working Group with representatives from the National Governors Association, the U.S. Environmental Protection Agency (EPA), State and Tribal governments, and environmental interest groups. The Working Group advises EM on the conduct of our End States initiative at the national level. At the site level, Field Office managers are providing additional time for meaningful stakeholder input into their End States Vision documents. In addition, Field Office managers have been instructed to "involve stakeholders in a straightforward and frank manner . . . ". EM has reinforced that the End States Vision documents are not final decisions on cleanup plans, but are instead a vehicle for discussions with our stakeholders and regulators on potential alternatives to the current cleanup plans. Through these efforts, EM is taking the time at the site and national levels to involve our stakeholders and regulators in the End States process.

TRANSFER OF CLEANUP FROM ENVIRONMENTAL MANAGEMENT TO THE NATIONAL NUCLEAR SECURITY ADMINISTRATION

Question. The President's budget provides for the transfer of cleanup responsibility from the Department of Energy's Office of Environmental Management to the NNSA at several NNSA sites. This transfer of authority promises to deliver savings as a result of improved efficiency and intends to be more consistent with the NNSA Act. While I appreciate the fact that NNSA site managers will no longer be required to report to both the NNSA and EM regarding cleanup activities, I am concerned that EM will not remain a top priority within NNSA. What guarantee do we have

that NNSA will approach cleanup as effectively as EM has in reducing the time and cost of cleanup of DoE sites across the complex?

Answer. This proposal resolves conflicts emanating from the NNSA statute, which precludes any non-NNSA official other than the Secretary and Deputy Secretary from directing NNSA personnel. In addition, the NNSA accepts responsibility for environmental work at NNSA sites, and will make every effort to conduct cleanup as effectively as EM has in reducing the time and cost of cleanup of DOE sites across the complex. The functional transfer of environmental scope, funding and the associated Federal personnel from the Office of Environmental Management (EM) to the NNSA aligns responsibility with accountability, ensures clear accounting of the total cost of ownership, and improves overall effectiveness and efficiency. The transfers resolve existing inefficiencies caused by the duplicate EM/NNSA chain of command. The NNSA has established the organizational and operational framework needed to ensure that cleanup activities at NNSA sites will continue to be accomplished effectively and efficiently once the transfers are approved by Congress. The cleanup processes and approaches that have worked so well in EM, along with the EM field staff who are currently executing this at NNSA sites, will be integrated into the NNSA. As with EM, the NNSA's corporate approach to environmental cleanup at NNSA sites will focus on risk reduction and compliance, pursue accelerated cleanup, and involve stakeholders. NNSA will use their successful Facilities and Infrastructure Recapitalization Program (FIRP) as the business model for managing their new environmental responsibilities. This includes strong central management and accountability for results; best-in-class business practices; and transparency in budget and program performance.

Question. The NNSA has major responsibilities of maintaining our nuclear deterrent, supporting the Naval Reactor program and stopping proliferation of nuclear material. Do you believe NNSA will be able to achieve the same level of success that EM has achieved in cleaning up 80 DOE sites?

Answer. Yes. The decision to transfer cleanup responsibilities at NNSA sites to the NNSA is the culmination of 2 years of effort within the Department. After careful consideration, the Department concluded that the conduct of cleanup work at NNSA sites is most effectively accomplished by NNSA personnel, who can integrate all operational requirements at NNSA sites to ensure that the NNSA Stockpile Stewardship mission, as well as the environmental cleanup responsibilities (which are inextricably intertwined at many NNSA sites), are successfully and most efficiently accomplished and resolve operational and priority conflicts between program mission and cleanup mission.

Key underpinnings of the environmental transfers are that the cleanup strategies, processes, and approaches that worked successfully in EM will be incorporated into the NNSA. The NNSA's environmental performance strategy will continue to focus on risk reduction and compliance, accelerated cleanup, and stakeholder involvement. The EM field staff currently conducting NNSA environmental activities will directly transfer to the NNSA, thereby maintaining the same level of technical expertise. The NNSA intends to manage its new environmental responsibilities using approaches proven to be effective in the Facilities and Infrastructure Recapitalization Program (FIRP) to include strong central management with accountability for results; focus on best business practices; and transparent budgets and program performance. The NNSA and EM are working corporately to ensure a seamless transfer of environmental responsibilities from EM to the NNSA.

Question. The budget provides over $696 million over the next 5 years to support NNSA-led cleanups. Does this budget provide sufficient funding to support these cleanup activities within NNSA and not divert scarce resources from science or nonproliferation activities?

Answer. Yes. This budget provides sufficient funding to support these cleanup activities within the NNSA and will not divert scarce resources from science or nonproliferation activities. The environmental transfers represent a zero sum budget transfer, fully resourced, from EM to the NNSA that provides sufficient funding and full time equivalent (FTE) positions to accomplish environmental cleanup activities at NNSA sites. The NNSA intends to manage its new environmental cleanup activities and funding entirely separate from other programs in the NNSA budget.

LOS ALAMOS NATIONAL LABORATORY CLEANUP STAYS WITH ENVIRONMENTAL MANAGEMENT FOR FISCAL YEAR 2006

Question. The President's budget proposes moving the cleanup responsibilities at six NNSA sites from the Office of Environmental Management to the NNSA. Two sites were not included in that transfer—Los Alamos and Y–12. Why didn't the

NNSA accept cleanup responsibility for Los Alamos and Y–12 this year? Will these facilities be transferred eventually?

Answer. The Department is taking a measured approach to this transfer to ensure that environmental responsibilities at NNSA sites are fully accounted for in the budget transfer requests.

The NNSA and EM agreed to defer the transfer of cleanup responsibilities for Los Alamos until after the Department of Energy and State of New Mexico finalize an important and complex Consent Order for Los Alamos National Laboratory. The Order was signed in March 2005. EM and NNSA are jointly reviewing all aspects of the Los Alamos environmental activities to ensure there is a clear understanding and agreement on the scope and attendant funding requirements of environmental responsibilities at LANL. Because of these issues, the Department will consider the transfer of Los Alamos environmental activities to the NNSA in fiscal year 2007.

The NNSA and EM agreed to postpone the transfer of Y–12 National Security Complex environmental restoration projects to coordinate it with the transition of contracting arrangements for environmental services at Oak Ridge. The Department plans to transfer environmental activities at Y–12 in future years.

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

OPENING OF YUCCA MOUNTAIN

Question. Originally, the Department was to open Yucca Mountain in 1998 to receive spent fuel from the Nation's utilities. Obviously that schedule has slipped. Last year, the President's budget proposed that the Department would submit the license application to the NRC at the end of 2004. Now, we understand that date has been delayed until December 2005—a delay of 1 year. Dr. Margaret Chu, the outgoing Director of the Office of Civilian Radioactive Waste Management was recently quoted in the press as saying that 2012 was now an optimistic forecast for initial operations at Yucca Mountain.

When do you believe Yucca Mountain will begin to receive spent nuclear fuel if the license application is submitted to the NRC in December 2005 as proposed in this budget?

Answer. As the Department indicated in last year's testimony, if the program did not receive its full request of $880 million, it would be unable to meet the goal of beginning waste acceptance in 2010. As you know, the Department did not receive the full funding amount and so now we are re-evaluating the program's schedule. The Department's efforts in this area are complicated by the Court's remand of the 10,000-year time period in the Environmental Protection Agency's radiation protection standard and by the ongoing need for stable funding. When these issues are resolved, the Department will then be in a position to establish a better estimate for opening the repository.

Question. In order to meet your current schedule what level of funding needs to be provided to the program for each fiscal year beginning in fiscal year 2006 until facility construction is complete?

Answer. The Department has developed two 10-year funding profiles that are only preliminary planning estimates. These funding profiles are intended to be used only for purposes of illustrating the possible funding levels associated with a 2012 or 2015 date for the start of repository operations. These profiles are based on several critical assumptions, including predictable and adequate program funding, the EPA radiation protection standard being in place by December 2005, and the start of construction of various non-nuclear items, such as the Nevada rail line before receipt of NRC construction authorization. Some of these assumptions will require specific policy decisions that have not yet been made, and as such these profiles do not represent administration policy.

A major operational problem is the lack of a regular funding profile. When appropriations are significantly below the budget request, which happens often, plans are derailed, staff are realigned or dismissed, deadlines missed, and costs increased.

PRELIMINARY PLANNING ESTIMATES 2012 START OF OPERATIONS

[In thousands of dollars]

	Fiscal Year 2006 Request	Fiscal Year 2007 Request	Fiscal Year 2008 Request	Fiscal Year 2009 Request	Fiscal Year 2010 Request	Fiscal Year 2011 Request	Fiscal Year 2012 Request	Subtotal	Fiscal Year 2013 Request	Fiscal Year 2014 Request	Fiscal Year 2015 Request	Total
Total Program Requirements	651,447	1,019,503	1,169,740	1,616,000	1,804,000	1,911,000	1,520,000	9,691,690	1,090,000	850,000	850,000	12,481,690
Funding From:												
Nuclear Waste Fund Fee Income	300,000	519,503	619,740	765,000	766,000	767,000	769,000	4,506,243	772,000	620,000	620,000	6,518,243
Nuclear Waste Fund Corpus	.....	.....	.....	301,000	488,000	594,000	201,000	1,584,000	38,000	.....	.....	1,622,000
Defense Nuclear Waste	351,447	500,000	550,000	550,000	550,000	550,000	550,000	3,601,447	280,000	230,000	230,000	4,341,447
Total Funding	651,447	1,019,503	1,169,740	1,616,000	1,804,000	1,911,000	1,520,000	9,691,690	1,090,000	850,000	850,000	12,481,690

PRELIMINARY PLANNING ESTIMATES 2015 START OF OPERATIONS

[In thousands of dollars]

	Fiscal Year 2006 Request	Fiscal Year 2007 Request	Fiscal Year 2008 Request	Fiscal Year 2009 Request	Fiscal Year 2010 Request	Fiscal Year 2011 Request	Fiscal Year 2012 Request	Fiscal Year 2013 Request	Fiscal Year 2014 Request	Fiscal Year 2015 Request	Total
Total Program Requirements	651,447	1,019,503	1,169,740	1,391,000	1,404,000	1,711,000	1,695,000	1,365,000	1,175,000	1,060,000	12,641,690
Funding From:											
Nuclear Waste Fund Fee Income	300,000	519,503	619,740	765,000	766,000	767,000	769,000	772,000	774,000	778,000	6,830,243
Nuclear Waste Fund Corpus	.....	.....	.....	76,000	88,000	394,000	376,000	313,000	171,000	52,000	1,470,000
Defense Nuclear Waste	351,447	500,000	550,000	550,000	550,000	550,000	550,000	280,000	230,000	230,000	4,341,447
Total Funding	651,447	1,019,503	1,169,740	1,391,000	1,404,000	1,711,000	1,695,000	1,365,000	1,175,000	1,060,000	12,641,690

EPA AND THE RADIATION STANDARD

Question. Last summer, the radiation standard for the project was vacated by a ruling from the U.S. Court of Appeals in *NEI* v. *EPA*. It has been rumored the EPA is preparing a draft regulation to be available by mid-2005. What impact will this Court decision have on the project if EPA fails to develop a new regulation setting the radiation standard?

Answer. The license application will be delayed further.

Question. Are you aware of any discussions within the administration to ensure a radiation standard is in place in order to support DOE's license application to the NRC?

Answer. It is my understanding that the administration is fully committed to the issuance of a revised EPA standard as soon as practicable.

LICENSE SUPPORT NETWORK

Question. The NRC has indicated they will not docket a license application until 6 months after certification of the License Support Network, a web-based data collection of all relevant documents for the application. What is the status of your work to address the shortcomings NRC identified in your earlier license support network submission?

Answer. Since the NRC ruling, the Department has focused on three key activities—processing legacy e-mails, identifying additional documents that may be relevant to the licensing proceedings, and reviewing relevant documents for privileges. The Department has made substantial progress in its efforts to complete the work necessary for certification of the Licensing Support Network.

Question. When do you anticipate it will be certified?

Answer. The Department's objective is to be prepared to certify its document collection by this summer.

Question. Are you confident that you can meet this target?

Answer. The certification process has proven more time-consuming than originally envisioned. We are working diligently toward our goal of certifying this summer.

LICENSE APPLICATION

Question. The Department now plans to submit a license application to NRC late in 2005 for the construction of the repository, a year later than the schedule you provided to us by DOE last year. What specific activities will you be undertaking this year on the license application at DOE headquarters and will these activities facilitate an expeditious review of the application by NRC?

Answer. We are making improvements to the analysis and presentation of information in the draft license application to meet our objective of completing preparation of a high quality license application. These improvements to the document will facilitate the NRC's review by making our analyses more robust and straightforward. We also continue to interact with NRC staff in meetings open to the public in the form of technical exchanges and management meetings to inform the NRC on the status of our technical activities and our plans.

Question. What milestones are scheduled to complete overall for the project this year?

Answer. Our foremost milestone is to complete the license application by December of this year and have it ready to submit to the NRC.

TRANSPORTATION

Question. The increase in the request over fiscal year 2005 appropriations is primarily focused in the transportation arena, an aspect of the program that has been repeatedly deferred when appropriations were reduced from budget requests. Please provide a description of the specific transportation activities included in the budget request.

Answer. We have requested funding appropriate for the activities we can reasonably accomplish in fiscal year 2006. Within the request of $651 million, funding is provided for transportation infrastructure development activities, including design and long-lead procurement for the Nevada rail line; design, certification and procurement of transportation casks and rolling stock; completion of the rail alignment final Environmental Impact Statement (EIS); issuance of a record of decision; and expansion of institutional outreach.

Question. If funding is not provided for these activities, would this impact initial operation of the repository?

Answer. As waste acceptance at the repository depends on our ability to transport it there safely and securely, full funding of our transportation activities is critical.

Not funding these activities would adversely impact the initial operation of the repository.

Question. What transportation related challenges still face this project?

Answer. The following challenges still face the project: (1) An EIS on rail alignment has to be completed, and a final alignment selected. (2) The selected alignment needs protection through establishment of a permanent withdrawal or establishment of a right-of-way. (3) New cask designs and certificates of compliance from the Nuclear Regulatory Commission are needed to ship the majority of the contents destined for disposal at the repository. (4) Rail cars have to be designed and tested to meet new railroad standards for shipment of spent nuclear fuel. In addition, the Department is actively working with stakeholders to develop transportation routes and to establish the process for funding emergency preparedness training.

None of these challenges is dependent on new technology, but they all require funding to be completed successfully. Additionally, the State of Nevada's legal case challenging the transportation mode and rail corridor records of decision or any additional lawsuits could cause delays.

Question. What opportunities could the State of Nevada interfere with various permits or rights of way that may delay the Yucca Project even further?

Answer. DOE will need several permits from the State of Nevada under the Clean Air Act and the Clean Water Act. DOE also will need land use permits, approval of road construction projects, and appropriation of water for use at the project. We are hopeful that the State will proceed in a fair and expeditious manner to grant the required permits, although the State Engineer has already denied the project's water use permit. This denial is in litigation.

TECHNICAL CHALLENGES

Question. The budget justification for Yucca Mountain and supporting documentation identified a number of regulatory and legal risks that may further jeopardize the timely completion of the Yucca Mountain project, but there was no mention of any technical risks. Are you aware of any technical, geologic or other scientific reasons that might prevent the placement of spent nuclear fuel or high level waste at Yucca Mountain?

Answer. No. We have confidence that we have addressed the technical, geological, and other scientific matters that are relevant to the placement of spent fuel and high-level radioactive waste at Yucca Mountain. The NRC will ultimately decide through the licensing process, with full public participation, whether our efforts are sufficient to justify issuance of a license to construct and operate a repository at Yucca Mountain.

FEES PAID FOR YUCCA MOUNTAIN

Question. The Department has not provided a Total Systems Life Cycle Cost Analysis for the program since May 2001. This analysis is required to determine the adequacy of the fees paid into the Nuclear Waste Fund and the appropriate mix of civilian and defense funding sources. Is the Department currently conducting an updated Total System Life Cycle Cost Analysis, and if not why not?

Answer. Although a complete program analysis has not been conducted since 2001, the Department has updated portions of the life cycle cost estimate to support planning and budget developments. We expect to undertake a comprehensive, bottom-up cost analysis following submission of the license application to the NRC. Additionally, in accordance with the Nuclear Waste Policy Act, the Department annually assesses the adequacy of the fee under a variety of economic, cost-sharing, and life cycle costs scenarios.

Question. The budget proposed that the fees should be tied to the annual appropriation to ensure that the fees paid by ratepayers not exceed what has been appropriated. Will the administration propose legislation to enact this change? What impact will this have on the budget?

Answer. The administration supports legislation to enact the 2005 Budget proposal to reclassify receipts as discretionary offsetting collections. Although Congress did not adopt that language last year, the administration remains interested in pursuing such a proposal and intends to have further discussions with the Congress on these issues in the hope of reaching some agreement on reclassifying receipts in a budget-neutral manner.

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

OFFICE OF ENVIRONMENTAL MANAGEMENT

HANFORD CLEANUP CUTS

Question. Mr. Golan, it appears Hanford makes up over 50 percent of the cut facing the entire Environmental Management program. Hanford's proposed cut is around 13 percent while the proposed cuts for other large, ongoing DOE cleanup projects range from 1 percent to 6 percent. Based on these numbers, it appears that Hanford is taking a disproportionate share of these cuts in the DOE cleanup budget request. Why does Hanford take this large budget reduction when it is the most contaminated site in DOE's complex, and why is Hanford's cut so large in comparison to these other sites?

Answer. The fiscal year 2006 budget supports the Department's needs in meeting its commitments at Hanford. In fiscal year 2006, the Department is requesting more than $1.8 billion for cleanup work at Hanford, a figure representing over 27 percent of the entire EM budget and 20 percent more than the fiscal year 2001 funding.

For the past few years, the administration has requested and received funding increases to address its urgent risks sooner and to accelerate cleanup. We committed that if we could eliminate those urgent risks, then starting in fiscal year 2006, we would request a declining level of funding to complete our work. The fiscal year 2006 budget represents the next stage in our strategy.

Hanford's fiscal year 2006 budget request accounts for this completion of work, and is commensurate with seismic, legal, and programmatic uncertainties. Examples of major risk reduction at Hanford include completion of removal of spent nuclear fuel from the K-Basins, completion of nuclear material and residue stabilization project, and removal of all pumpable liquids from older-style single shell tanks.

The budget request for Waste Treatment Plant (WTP) construction is $59 million less than the fiscal year 2005 comparable appropriations due to recently discovered seismic uncertainties. A detailed analysis of the impacts associated with the change in seismic criteria is underway. The analysis will allow DOE to decide how to proceed with the completion of the WTP. There are also several legal uncertainties which impact the Department's ability to close waste tanks. The associated fiscal year 2006 request to account for these uncertainties is $70 million less than the fiscal year 2005 comparable appropriations budget. There are uncertainties associated with retrieval and disposal of tank waste that the Department believes may be transuranic waste. These uncertainties account for a fiscal year 2006 request that is $20 million less than the fiscal year 2005 comparable appropriations budget.

Question. Mr. Golan, the Department of Energy seems to contend this budget cut will not result in missing legally enforceable cleanup milestones in fiscal year 2006 and beyond. How is it that these cuts will not delay cleanup completion and increase life cycle costs?

Answer. This budget supports the Department's needs in fiscal year 2006 for implementing the accelerated risk reduction and cleanup completion at our sites and meeting enforceable milestones. As noted in our budget justifications, fiscal year 2006 represents the first year of a declining budget request from our "peak year" of fiscal year 2005, an expected outcome brought about by accelerating risk reduction and cleanup completion. For the past few years, the administration has requested and received more funding for the Environmental Management program to accelerate cleanup and reduce risk. The strategy was to invest these additional resources to accelerate cleanup and complete work sooner, reform the acquisition strategy to compete more work and place incentives on cleanup completion, and work with regulators to develop more effective cleanup approaches, resulting in cost savings in the longer term. This is being accomplished at Hanford and regulatory milestones are expected to be met with this budget request. However, the Hanford cleanup program has significant technical and legal/regulatory challenges that are resulting in uncertainties. Thus, in fiscal year 2006, some projects will be slowed due to such uncertainties, and our budget reflects them accordingly. Our Hanford staff is continuously reviewing its strategies and technologies for optimization, such as tank retrieval and waste loading at the Waste Treatment Plant. Because of these efforts, it is premature to assume there will be a delay or cost increase.

HANFORD WORKFORCE REDUCTIONS

Question. Mr. Golan, as I'm sure you'll acknowledge, the reduction in funding being proposed by the administration for Hanford will mean significant workforce reductions there. I understand the estimate is that the proposed cuts will mean layoffs of between 1,500 and 2,000 workers across the site. That means the layoff proc-

ess will have to begin in August and September in order not to further magnify the impacts in fiscal year 2006. Is this correct?

Answer. Workforce reductions are always a possibility at Hanford as projects are completed and the skills mix for the remaining work scope is reprioritized. DOE and its contractors continue to identify and manage work scope, schedule, and cost.

DOE has currently approved workforce reductions for Fluor Hanford, Inc., (FHI) for up to 1,000 contractor employees, with 600 employees to be separated by September 30, 2005. The remaining 400 employees are planned to be separated no later than September 30, 2006.

Additionally in fiscal year 2005, DOE approved a previous workforce reduction request from FHI which resulted in a reduction of 154 contractor employees. The 154 reductions consisted of 148 FHI employees who were separated by April 29, 2005, and six Bechtel Hanford, Inc., employees who were separated by June 3, 2005.

These reductions are attributable to planned clean up progress and reprioritization of fiscal year 2006 work scope and the projected skills mix needs for the balance of the contract.

HANFORD TANKS WASTE TREATMENT

Question. Mr. Golan, all of us in the Pacific Northwest delegation applauded your efforts to complete the removal of the liquids from the single shell tanks, but there are still millions of gallons of sludge and solids that must be removed. Now we're looking at delays in completion of the waste treatment plant, which means that if you stay on schedule for tank farm retrieval operations, the existing double-shell tanks are going to fill up long before you have the treatment plant in operation. Do you still plan to meet your commitment to empty the single shell tanks by 2018? And if so, aren't you going to have to build more double-shell tanks to receive the remaining wastes?

Answer. We continue to take the steps that are necessary and prudent to meet our Tri-Party Agreement (TPA) commitments, including emptying the single-shell tanks by 2018. In the Hanford Performance Management Plan (August 2002), DOE's analyses indicated that in order to meet the TPA requirement to complete tank waste treatment by 2028, several changes in our approaches were required to enable waste to be retrieved and treated sooner. One of the recommended changes is to evaluate the use of supplemental treatment techniques for low-activity waste (LAW).

Bulk vitrification (BV) is one of the candidate technologies under evaluation for the immobilization of LAW from the Hanford tanks. The Washington Department of Ecology (Ecology) recently issued a Research, Development, and Demonstration permit that enables DOE to test the BV technology on approximately 200,000 gallons of low-activity tank waste. If the BV technology performs as anticipated based upon laboratory, engineering scale, and full-scale tests with surrogate materials, it would provide a means to more rapidly treat LAW, which makes up approximately 90 percent of the single-shell tank waste volume.

Some of the LAW requires less pretreatment than the WTP is designed to provide. This waste could, therefore, proceed through other treatment processes, such as BV, which have minimal need for double-shell tank space. We do not plan to build any additional double-shell tanks to facilitate single-shell tank retrievals. Whereas new double-shell tanks may offer some advantages relative to facilitating certain retrieval actions, those benefits are more than offset by the additional contaminated underground tanks that would be created, all of which would need to be cleaned and closed at some future date.

HANFORD WORKER HEALTH AND SAFETY ISSUES

Question. Mr. Golan, there are many significant worker health and safety issues with Hanford cleanup. I know that Secretary Bodman has said that safety is his No. 1 priority. What procedures are you putting in place to assure that the Department continues to improve its health and safety protection for workers at sites such as Hanford?

Answer. As you have mentioned, safety is the Secretary's No. 1 priority. Safe working conditions and processes are an essential precursor to and an indicator of performing quality work.

We have established an organizational goal of zero injuries and zero accidents. To reach this goal, we have done the following.

—Weekly and individual calls with the field managers, EM management staff meetings and other interactions with direct reports at Headquarters, and quarterly project reviews with each site that focus on safety and safety management.

—We have incorporated safety performance as the highest weighted standard in the field managers' performance objectives. This includes a commitment that the field managers and their direct reports overseeing operations and cleanup are in the field, in personal protective equipment where needed, at least 200 hours a year observing first hand work activities with an emphasis on operational safety.
—We have also directed the use of contracts to define and communicate worker safety and health expectations, and on multiple occasions have used the contract clauses to hold contractors accountable for less than adequate safety performance.
—We have significantly upgraded accident and injury reporting by requiring all contractors, subcontractors, and vendors, regardless of size, to report their illness and injury statistics to DOE. With these data, we can analyze trends and share lessons learned, which we do on nearly a daily basis among the sites.
—We are improving Federal oversight by ensuring we have the Federal staff with the right training and qualifications, positioned in the right place at the right time. We have made more resources available for training to qualify our managers and safety professionals who are in the field where the work is being performed.
—We are instilling the expectation that any worker can question the work activities and has the authority to stop that work if he or she believes safety is compromised. By empowering the worker with the ability to stop work, we are better able to address errors before accidents happen.

The emphasis we have placed on responsibility, accountability, oversight, and technical competence flowing down through the DOE manager to the contractors and subcontractors management and most importantly to the workers, is the right course of action to improve the Department's health and safety record.

EM PROCUREMENT DECISIONS

Question. Mr. Golan, many EM procurement decisions are being challenged and some have been overturned. What actions are you taking to improve the quality, fairness, timeliness, and success of the EM procurement process, specifically for River Corridor and FFTF, which have been delayed for many months?

Answer. The Secretary has ordered a review of the procurement process. This review is currently being conducted. We would be happy to meet with you after the review is completed and the Secretary has made his determination.

HANFORD WASTE TREATMENT PLANT

Question. Mr. Golan, DOE has made a major commitment to the Hanford Waste Treatment Plant to separate and vitrify tank waste. The Defense Nuclear Facilities Safety Board and others have raised serious questions about the safety of the design and prospect for cost increases and schedule slippage. Given the supreme importance of this project to the future of Hanford cleanup, what do you propose to ensure that this facility stays on track? Should there be an independent review by nationally recognized technical experts to advise DOE on how to address these issues and minimize the impacts to cost and schedule?

Answer. A detailed analysis of the impacts associated with the change in seismic design criteria is underway. The analysis will allow DOE to decide how to proceed with the completion of the WTP. To provide an independent view, EM has brought in a number of outside experts on seismic issues and their effect on facility design and construction, including the U.S. Army Corps of Engineers and the Pacific Northwest National Laboratory.

VOLPENTEST HAZARDOUS MATERIALS MANAGEMENT AND EMERGENCY RESPONSE TRAINING CENTER (HAMMER) FACILITY

Question. Mr. Golan, the Volpentest HAMMER Training and Education Center at Hanford was built by DOE to ensure the health and safety of Hanford cleanup workers and emergency responders. HAMMER's unique hands-on "Training as Real as It Gets" is essential to the safe, cost-effective, and successful completion of Hanford cleanup. Further, as the cleanup workforce decreases, more of HAMMER's capabilities will become available for other DOE missions, such as energy assurance and hydrogen safety, and for training law enforcement, security, emergency response, and other homeland security-related personnel. Yet, funds were eliminated again from the budget for HAMMER.

After being proposed by DOE and authorized by Congress, for the past several years DOE has failed to request the funding needed to operate HAMMER. Why do

you force Congress year after year to direct you to fund this facility that is essential to achieving your mission of safe accelerated cleanup at Hanford?

Answer. The Volpentest Hazardous Materials Management and Emergency Response Training Center (HAMMER) facility continues to play an important role in Hanford cleanup, training our workers to safely perform their roles in their cleanup activities. We continue to include the costs for HAMMER in our baseline Hanford budget, distributing the costs to each of the EM programs that use the HAMMER facility for their workers. HAMMER was established to ultimately be self-sustaining. Thus, as EM cleanup is accomplished and the workforce decreases, the non-Hanford work at HAMMER should grow. This will allow HAMMER to continue to provide its unique facilities to other national priorities, such as energy assurance, hydrogen safety, emergency response, and other homeland security-related training.

Question. Mr. Golan, what are you going to do to ensure that DOE continues to fully utilize HAMMER to protect the safety and health of Hanford cleanup workers? Will you support the development of new DOE training missions at HAMMER? Will you actively work with the Department of Homeland Security and other agencies to develop, expand, and support other training missions at HAMMER?

Answer. DOE continues to use the Volpentest Hazardous Materials Management and Emergency Response Training Center (HAMMER) to provide hands-on safety training for workers involved in the Hanford cleanup mission and considers HAMMER's role in Hanford's safe operation to be vital.

The HAMMER facility remains available for use by other DOE entities and other agencies on a full cost recovery basis. By covering the costs of maintaining HAMMER, EM is, in fact, making excess capacity at HAMMER available for use by others. HAMMER was established to ultimately be self-sustaining. We continue to encourage the development of new missions at HAMMER to offset the impacts of a declining EM workforce in the future. EM will cooperate with the Department of Homeland Security (DHS) to develop a strategy and a cooperative agreement to ensure that HAMMER remains available to meet their growing training needs. We want to ensure that HAMMER, as a national asset, continues to serve this country's needs now and in the future, beyond the cleanup mission.

HAMMER is already involved in the training of fire, law enforcement, Customs and Border Protection, security, emergency medical, and other emergency response personnel for a wide-spectrum of regional and Federal agencies on a full cost recovery basis. A strong partnership has been forged between HAMMER and the Pacific Northwest National Laboratory to use HAMMER as a test bed to deploy new field technologies for homeland security personnel. Sharing HAMMER with DHS would maximize the investment of Federal funds spent so far to build and develop HAMMER.

EM CONTRACTOR WORKFORCE

Question. Mr. Golan, what has DOE done to ensure that all cleanup work scheduled for the current fiscal year (fiscal year 2005) is not impacted by the costs associated with funding reductions and layoffs for fiscal year 2006?

Answer. The Office of Environmental Management (EM) uses a combination of contractor workforce restructuring strategies that most effectively accomplish a site's mission objectives. The primary objective is to retain employees with the skills, knowledge and abilities necessary to effectively and safely meet assigned and future missions. Restructuring strategies are closely integrated with planning based on identified work requirements. Both short-term requirements for immediate tasks, as well as long-term requirements for skills based on missions identified in the sites' strategic plans are considered. Improvements in organization and operations efficiency are also considered, including changes in internal organizational structure and contracting mechanisms, as well as contractual provisions, collective-bargaining agreements, and other legal obligations.

Cleanup work for fiscal year 2005 is being completed as scheduled. Timing of workforce reductions is driven primarily by the completion of work consistent with the pace of the program's cleanup progress. The fiscal year 2006 budget request reflects the fact that cleanup is progressing as projects are completed. Contractors continue to identify and manage work scope, schedule, and cost, and plan their workforce needs accordingly with anticipated funding. Additional workforce reductions may occur throughout fiscal year 2005, regardless of the fiscal year 2006 budget. As these additional reductions become necessary, timely congressional notification will be provided.

ADEQUATE FUNDING FOR YUCCA MOUNTAIN

Senator DOMENICI. Let me just ask, did you say in your testimony that the amount requested by the administration, that it is your position that that is satisfactory for this year?

Mr. GARRISH. Six hundred fifty-one million dollars is satisfactory to complete the activities that we can reasonably accomplish in fiscal year 2006.

Senator DOMENICI. Okay. Since we are discussing such large amounts of money for the clean-up of the sites, I just want for the record to make a statement that I think perhaps in a couple years people will understand what this means, but we've been spending billions and billions of dollars in clean-up and all of that's been done on the basis that the current standard for impact on human health from low-level radiation exposure is accurate. And it's a very old standard and it's linear in nature, and I'm just going to state in the record, wouldn't we be shocked to learn maybe 10 years from now that that standard is wrong and has been wrong all along, and that that dosage is far too low in terms of the relationship to human safety. Incidentally, there is a major study going on right now, it's in its fifth year, by the National Academy and great scientists who are looking at that.

SUBCOMMITTEE RECESS

I am convinced, and I just want to state this in the record, that they will conclude that it is not right, and that will say that—will indicate that over the years perhaps we have spent untold amounts of money trying to save ourselves from something that wasn't harmful to begin with. That doesn't—you can't do anything about that. You've got to keep on doing that.

Having said that, we are recessed.

[Whereupon, at 10:33 a.m., Tuesday, March 10, the hearing was recessed, to reconvene subject to the call of the Chair.]